



# Federal Transportation Funding Analysis & Forecast

## Infrastructure Funding Analysis and Strategic Planning – Task 1 Report

*Cincinnati USA Regional Chamber of Commerce*

June 10, 2022

  
Cincinnati USA  
Regional Chamber



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# 1 Executive Summary

## 1.1 Project Summary

This report evaluates and summarizes the changes to transportation formula funding programs and discretionary grant opportunities associated with the Infrastructure Investment and Jobs Act (IIJA) – also known as the Bipartisan Infrastructure Law (BIL) – focusing on programs that support planning for and constructing transportation capital improvement projects.<sup>1</sup> This analysis includes an estimate of the potential funding that the Cincinnati Region can expect from formula programs administered by the United States Department of Transportation (USDOT), with a focus on those administered specifically by the Federal Highway Administration (FHWA), Federal Aviation Administration (FAA) and Federal Transit Administration (FTA).

## 1.2 Findings

Through interviews with transportation stakeholders in the region as well as analysis of funding amounts available from the White House and the US Department of Transportation, the team made the following findings:

- The region would have been allocated approximately \$250 million in federal transportation funds per year with a continuation of existing funding levels under the Fixing America’s Surface Transportation (FAST) Act.<sup>2</sup>
- The region can expect allocations of approximately \$300 million under the IIJA
- This represents a 25% increase in baseline funding (i.e., funding that is distributed by formula).
- Formula programs were increased between 20% and 30% on average (in line with expected distributions to the region), but discretionary programs, which are available nationally and award funding through competitive grants, increased by orders of magnitude – approximately 300% more money is available each year in discretionary transportation funds than in previous years. While discretionary funds still represent a small portion of the overall funding available, this increase in funds and programs creates tremendous opportunity.

This increase is significant and will help to close the region’s current funding shortfall across all transportation infrastructure types. However, many of the region’s agencies reported that these baseline increases would not go beyond addressing existing deficits, and noted challenges associated with leveraging these opportunities because of restrictions on eligible expenses, local match requirements, and other considerations.

- Recommendations:
  - Maximizing the impact of the increase in formula funds and ensuring efficient distribution of available resources across the region, requires agencies to consider revisiting existing capital programs and plans to ensure that those plans reflect new opportunities created by the IIJA – this is best done as part of a regional effort aligned with the Chamber’s Connected Region vision.
  - In order to be competitive for discretionary funds, the region needs to be proactive in understanding how priority projects align with USDOT policy directives and specific grant program requirements and how agency priorities overlap and/or compete with one another. Again, this is best done as part of a regional effort aligned with the Chamber’s Connected Region vision.

<sup>1</sup> Public Law 117-58  
<sup>2</sup> Public Law 114-94

# 2 Background

## 2.1 Project purpose

The Cincinnati USA Regional Chamber (the Chamber) undertook this study in partnership with the region's transportation agencies and other key stakeholders in order to summarize, analyze, and apply the newly available funding resulting from the enactment of the IIJA. This study has two major goals:

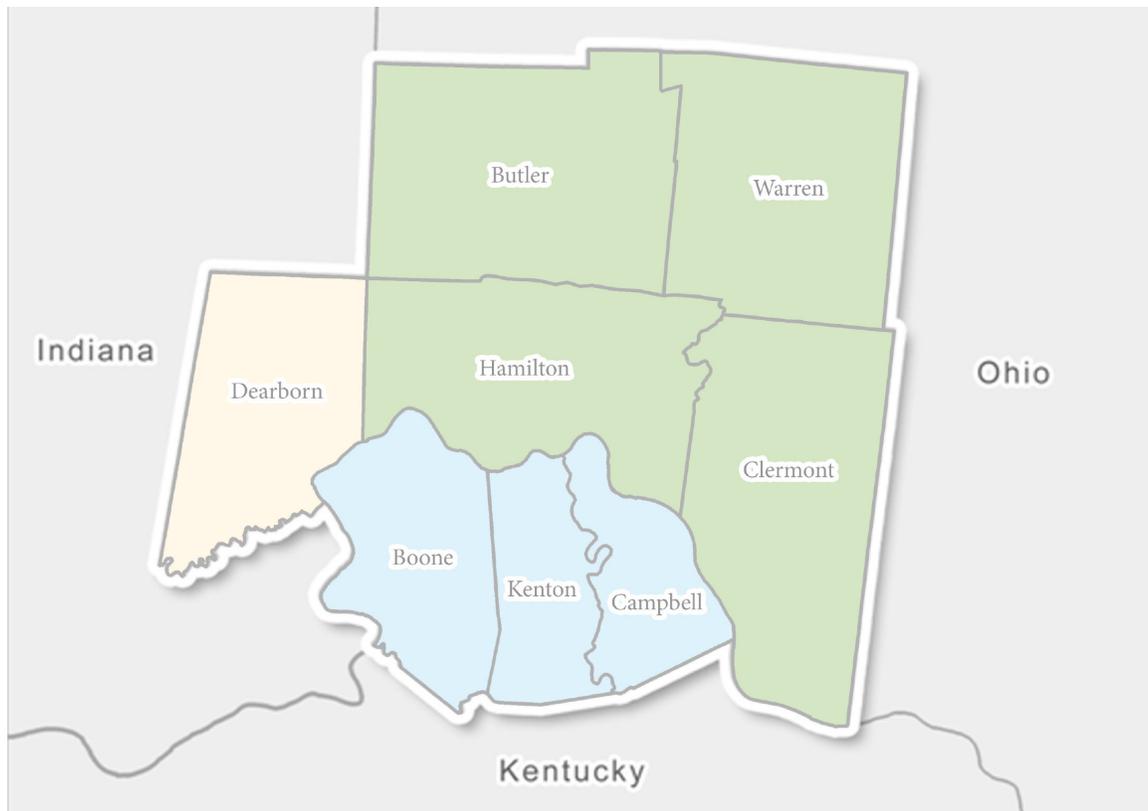
1. To provide the Chamber's member organizations with information regarding the increased funding levels to existing transportation programs, a description of the new programs created by the IIJA, and the potential for such programs to support local priorities. This report is in support of this first goal.
2. Develop a strategic plan for leveraging these new opportunities to pursue funding for projects key to the implementation of the Chamber's vision for a Connected Region. The project team is engaged in data collection and outreach in support of this effort, and a future report will serve as the strategic plan.

## 2.2 Study area

### 2.2.1 Geography

This analysis is primarily focuses on the census-designated Cincinnati, OH-KY-IN Urbanized Area (UZA), which includes the 788 square miles centered on the City of Cincinnati. The full Ohio Kentucky Indiana Regional Council of Governments (OKI) boundaries include all the eight counties shown in Figure 1 below. The federal funding analysis estimates allocations for this entire region, although relatively little of this money is expended outside the UZA.

**Figure 1. Cincinnati Region**



Source: OKI

The Cincinnati Region has a population of just over 2 million people, of which 80% live within the urbanized area boundaries. Table 1 shows the population breakdown for the region, including the share within each of the three states.

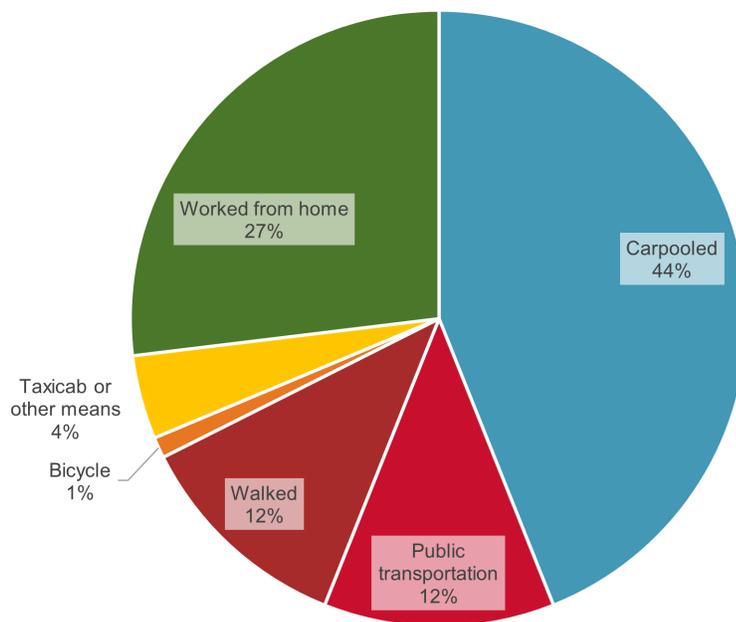
**Table 1: Cincinnati Area Population Totals**

	GREATER CINCINNATI REGION (MPO BOUNDARIES)	OHIO PORTION	KENTUCKY PORTION	INDIANA PORTION
Total Population	2,078,215	1,636,075	392,528	49,612
Percentage of Total	100%	79%	19%	2%

Source: ACS 2016-2020 5-Year Estimates. 1.6 million people (81% of the region’s total poluation) live within the urbanized area (UZA).

81% of workers in the Cincinnati urbanized area commute by driving alone, which is about five percentage points higher than the nationwide average.<sup>3</sup> The split of alternate commute modes is shown in Figure 2. Understanding the way people travel today can help decision-making related to future investments in the transportation network.

**Figure 2: Share of Cincinnati UZA Commuters by Mode Choice Other than Single-Occupancy Vehicle**



Source: ACS 2016-2020 5-Year Estimates

<sup>3</sup> American Community Survey, 2016-2022 5-Year Estimates

## 2.2.2 Project Partners

The Connected Region vision seeks to build on the existing collaboration between owners, operators, and planners of the Cincinnati Region’s transportation infrastructure. That includes the DOTs from each of the three states, the region’s three stand-alone transit agencies, the MPO, airports, counties, and municipalities. The full list of relevant public agencies includes:

- State Departments of Transportation
  - Ohio Department of Transportation (ODOT)
  - Kentucky Transportation Cabinet (KYTC)
- Metropolitan Planning Organization
  - Ohio-Kentucky-Indiana Regional Council of Governments (OKI)
- Transit Agencies
  - Southwest Ohio Regional Transit Authority (SORTA)
  - Transit Authority of Northern Kentucky (TANK)
  - Butler County Regional Transit Authority (BCRTA)
- Airports
  - Cincinnati/Northern Kentucky International Airport (CVG)
- Local Departments of Transportation
  - Cincinnati Department of Transportation & Engineering (DOTE)

**Table 2: Counties in the Greater Cincinnati Region**

OHIO	KENTUCKY	INDIANA
Hamilton Butler Warren Clermont	Boone Kenton Campbell	Dearborn

**Table 3: Municipalities in the Cincinnati Region (population over 5,000)**

OHIO	KENTUCKY	INDIANA
Blue Ash Cheviot Cincinnati Deer Park Fairfield Forest Park Hamilton Harrison Indian Hill Lebanon Loveland Madeira Mason Middletown	Milford Monroe Montgomery Mt. Healthy North College Hill Norwood Oxford Reading Sharonville South Lebanon Springdale Trenton Wyoming	Alexandria Bellevue Cold Spring Covington Dayton Edgewood Elsmere Erlanger Florence Ft. Mitchell Ft. Thomas Ft. Wright
	Highland Heights Independence Taylor Mill Union Villa Hills	Lawrenceburg

There are six transit providers in the Cincinnati region. Three (SORTA, TANK, and BCRTA) are stand-alone agencies that provide fixed route and demand-response public transportation services. The other three are municipal or county agencies – these include the Board of Clermont County Commissioners, the County of Warren, and the City of Cincinnati. Table 4 shows the location and annual ridership for each provider.

**Table 4. Cincinnati Region Transit Providers**

AGENCY NAME <sup>a</sup>	CITY	STATE	AVERAGE ANNUAL BOARDINGS(2015-2019) <sup>b</sup>
Southwest Ohio Regional Transit Authority (SORTA)	Cincinnati	OH	15,056,743
Transit Authority of Northern Kentucky (TANK)	Covington	KY	3,313,675
Butler County Regional Transit Authority (BCRTA)	Hamilton	OH	588,543
Board of Clermont County Commissioners	Batavia	OH	133,344
County of Warren (WCTS)	Lebanon	OH	37,959

Source: National Transit Database, 2020 Service Data Time Series

<sup>a</sup>The City of Cincinnati began directly operating streetcar service in 2020 and is now an eligible recipient of FTA funds.

<sup>b</sup> Because the long-term effects of COVID on transit usage remain unclear, this study focuses on pre-pandemic ridership numbers to demonstrate regional trends.

## 2.3 Process

To estimate the impact of the IIJA on the Cincinnati region, the project team first established a baseline understanding of regional distributions and expenditures of federal funds under the previous legislation (the FAST Act). This context helped inform the forecasted increase in revenue, as well as the strategic approach to maximizing new funding opportunities.

The analysis was informed by a review of the IIJA itself, as well as rulemaking and implementation guidance issued by various federal agencies. Most critically, a series of interviews with representatives of several key transportation agencies provided insight on existing processes as well as expectations for the future. These conversations were held via video conference call throughout February, 2022, and included the Cincinnati/Northern Kentucky International Airport (CVG), the Ohio Department of Transportation (ODOT), the Kentucky Transportation Cabinet (KYTC), the Ohio-Kentucky-Indiana Regional Council of Governments (OKI), the Transit Authority of Northern Kentucky (TANK), Butler County Regional Transit Authority (RTA), and the Southwest Ohio Regional Transit Authority/Metro (SORTA). See Appendix B for a summary of those discussions.

## 2.4 About the Connected Region

In an effort to align regional policy makers and transportation stakeholders toward a shared vision for transportation investments, the Chamber released The Connected Region in 2018. The goal of the Connected Region is to guide the region’s transportation investments and policy decisions to better connect people to jobs, education, health care and all that the Cincinnati Region has to offer. The vision lays out five principles for the community to embrace:

- Invest in the Future of Public Transportation
- Improve and Maintain Infrastructure
- Drive Innovation and Future-Oriented Investments and Projects
- Provide People with Choices That Fit Their Lifestyle
- Align Regional Decision Makers Toward the Vision

The Chamber’s transportation work is supported and advised by the Transportation Business Coalition, a group of senior business leaders from across the Cincinnati region. This report is funded in partnership with the Cincinnati USA Regional Chamber, REDI Cincinnati and the Cincinnati Business Committee.

# 3 Federal Funding Forecast

The IIJA reauthorized the existing federal formula and discretionary funding programs, previously authorized by the FAST Act. The IIJA provided an overall increase of nearly 25% for those existing formula programs and also created several new formula and discretionary programs. These are discussed in the following sections.

## 3.1 Overview of Federal Transportation Funding

Funding programs administered by the USDOT are partnerships between USDOT and state and local agencies, with a cost-share arrangement typically split 80% federal and 20% state or local. Because of the many programs with similar project eligibilities, it is not uncommon to fund projects from multiple formula and discretionary programs. While there is no limitation on the number of federal funding programs that can be included in a project’s financial strategy, the local match requirement applies to nearly all of the programs.

Federal transportation funding programs require coordination among the region’s transportation agencies. Use of these funds is typically identified several years in advance and is documented in the region’s transportation planning and programming documents, including the Regional Transportation Plan (RTP) and the Transportation Improvement Program (TIP). If FTA or FHWA formula programs are to be targeted as part of the Connected Region vision, the funds would have to be programmed after the current TIP period, or the project sponsor would have to work with OKI to reprogram and update the current TIP.

**Table 5: FHWA Formula Programs**

PROGRAM	DESCRIPTION
<b>National Highway Performance Program</b>	The largest of the federal-aid highway programs, this program supports improvement of the condition and performance of the National Highway System which includes Interstate System highways and bridges as well as virtually all other major highways.
<b>Surface Transportation Block Grant Program</b>	The program with the broadest eligibility criteria, funding any federal-aid highway, bridge projects, transit capital projects, nonmotorized transportation, and on bridge and tunnel inspection and inspector training.
<b>Highway Safety Improvement Program</b>	The HSIP supports projects that improve the safety of road infrastructure by correcting hazardous road locations, such as dangerous intersections, or making road improvements, such as adding striping. HSIP funds may also be used for road safety projects not on federal-aid highways.
<b>Railway-Highway Crossings Program</b>	This new program supports projects with the goal of reducing the number of fatalities, injuries, and crashes at public railway-highway grade crossings.
<b>Congestion Mitigation &amp; Air Quality Improvement (CMAQ)</b>	Funds authorized under the CMAQ program support projects and programs that may reduce emissions of transportation-related pollutants.
<b>Metropolitan Planning</b>	Funds are used to carry out metropolitan planning activities, including the development of the TIP, regional travel demand model, and related planning activities.
<b>National Highway Freight Program</b>	This program helps states and MPOs remove impediments to the movement of goods.
<b>Carbon Reduction Program*</b>	A new formula program to reduce transportation emissions or the development of carbon reduction strategies. Eligible uses of formula funds under this program include the construction, planning and design of trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation; public transportation projects; and congestion management technologies.
<b>Promoting Resilient Operations for Transformative, Efficient, Cost-Saving Transportation (PROTECT) Formula Program*</b>	A new formula program that supports the planning, resilience improvements, community resilience and evacuation routes, and at-risk coastal infrastructure. Funds may be used to conduct resilience planning, strengthen and protect evacuation routes, and increase the resilience of surface transportation infrastructure from the impacts of sea level rise, flooding, wildfires, extreme weather events, and other natural disasters. Highway, transit, and certain port projects are eligible.

\*programs established by the IIJA.

PROGRAM	DESCRIPTION
<b>Bridge Formula Program*</b>	This new formula program provides funds to states for bridge replacement, rehabilitation, preservation, protection, or construction projects on public roads.
<b>National Electric Vehicle Infrastructure Formula Program*</b>	A new formula program to provide funds to states to strategically deploy electric vehicle charging infrastructure and establish an interconnected network to facilitate data collection, access, and reliability.

\*programs established by the IIJA.

**Table 6: FTA Formula Programs**

PROGRAM	DESCRIPTION
<b>FTA Section 5303 and 5304 Metropolitan and Statewide Planning Funds</b>	Provides funding and procedural requirements for multimodal transportation planning in metropolitan areas and states.
<b>FTA Section 5307 Urbanized Area Formula Funds</b>	Makes federal resources available to urbanized areas and to governors for transit capital and operating assistance in urbanized areas and for transportation-related planning.
<b>FTA Section 5337 State of Good Repair Formula Grants</b>	Funds are available for capital projects that maintain a fixed guideway or a high intensity motorbus system in a state of good repair, including projects to replace and rehabilitate rolling stock, track, passenger stations and terminals, and other resources, as well as implement transit asset management plans.
<b>FTA Section 5339 (a) Bus and Bus Facilities Formula Program</b>	Makes federal resources available to states and direct recipients to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities including technological changes or innovations to modify low or no emission vehicles or facilities.

### 3.1.1 FAA Funds

The FAA does not directly distribute formula funds to airports. Instead, the agency uses formulas to determine entitlement limits from the broad Airport Improvement Program (AIP), and individual airports must apply for funds on a project-by-project basis. FAA also allows airports to apply for funds beyond their entitlement limits for certain projects, in which case the process more closely resembles a competitive grant award. Historically, the major airport funds (AIP in particular) were not identified in the surface transportation legislation, but the IIJA supplements existing funding through several new programs. The largest of these is the Airport Infrastructure Grants (AIG) program, which mimics the AIP process for distributing funding.

### 3.1.2 Federal Funds Suballocated at the Regional Level

Some federal formula programs are designed to support a regional project identification process, as opposed to one determined by states or another broader centralized agency. These funds, including portions of the Surface Transportation Block Grant (STBG) program, Congestion Mitigation and Air Quality Improvement Program (CMAQ), and the newly created Carbon Reduction program, use a formula to allocate funds to the regional planning organization (OKI plays this role in the Cincinnati region), which is then responsible for managing a process to suballocate funding through a documented project identification process. OKI awards funds from federal programs by soliciting applications for the four discrete bundles of programs listed in Table 7. This process covers major FHWA and FTA programs for which MPOs are responsible for suballocation and includes all three states within the OKI region. As of February 2022, OKI had no plans to modify the structure of these calls for projects. Therefore, additional funds distributed through existing and new programs (such as the Carbon Reduction program, which has a similar distribution mechanism to STBG) would fall within these application processes.

**Table 7. OKI Funding Opportunities**

STATES	FEDERAL PROGRAMS
OH & KY	Surface Transportation Block Grants (STBG), Congestion Mitigation and Air Quality program (CMAQ)
OH & KY	Transportation Alternatives (TA) set-aside of STBG program
OH, KY & IN	FTA Sec. 5310 Program
IN	STBG, TA & Highway Safety Improvement Program (HSIP), CMAQ

Source: <https://funding.oki.org/>

### 3.1.3 Other Federal Funds Expended in the Region

The TIP programs the federally funded transportation improvements and management actions to be completed by the state DOTs, transit agencies, local governments, and other project sponsors over a four-year period within the Greater Cincinnati region. As required by federal and state law, the TIP must be fiscally constrained to funds expected to be available. All projects selected to receive federal and State surface transportation funds, and all regionally significant projects regardless of funding type, must be identified in the TIP.

OKI is responsible for developing and approving the TIP. In addition to the projects identified through the four calls for projects, OKI directly selects some projects with federal funding and reviews state DOT- and transit agency-submitted projects for consistency with regional plans.

Fiscal Constraint is defined in regulation (23 Code of Federal Regulations, Part 450.104) as including sufficient financial information to demonstrate that projects in the metropolitan transportation plan and the TIP can be implemented using committed, available, or reasonably available revenue sources. In other words, projects in the plan must have identified funding to deliver the project.

## 3.2 Estimate of Baseline Funding

The estimate of federal funding to be spent on transportation projects in the Cincinnati region is designed to offer a baseline amount. In this case, “baseline” refers to the region’s likely share of USDOT formula-based funds, using historical trends and published allocation amounts. In other words, the funding estimate shown here is approximately the amount of federal funds the region can expect if it “does nothing,” or at least does not actively pursue discretionary grants and other opportunities created by the IIJA.

Incremental revenue estimates for the Cincinnati region were developed for 15 federal formula programs administered by the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA), including several new programs established by the IIJA.

The methodology to identify the incremental revenue included defining two scenarios (one assuming a continuation of FAST Act funding levels and one using the actual IIJA funding levels).

### 3.2.1 Results

- **If FAST Act funding levels had continued**, the Cincinnati region would have received an average of approximately **\$246 million per year** in federal surface transportation funding over the next five years.
- **Following the passage of the IIJA**, the Cincinnati region can expect to receive an average of approximately **\$305 million per year** in federal surface transportation funding over the next five years.
- **This represents a 24% increase in baseline federal funding.**

A year-by-year breakdown of results is shown in Table 8 and Table 9. A more detailed breakdown by individual formula program is included in Appendix A.

**Table 8. Estimated Baseline Federal Funding Continuing Pre-IIJA Levels**

\$ in Millions

PROGRAM	2022	2023	2024	2025	2026	5-YEAR TOTAL
FHWA	\$211.6	\$216.5	\$221.5	\$226.7	\$231.9	<b>\$1,108.3</b>
FTA	\$22.8	\$23.5	\$24.2	\$24.9	\$25.7	<b>\$121.1</b>
<b>TOTAL</b>	<b>\$234.4</b>	<b>\$240.0</b>	<b>\$245.7</b>	<b>\$251.6</b>	<b>\$257.6</b>	<b>\$1,229.4</b>

**Table 9. Estimated Baseline Federal Funding With IIJA increases**

\$ in Millions

PROGRAM	2022	2023	2024	2025	2026	5-YEAR TOTAL
FHWA	\$267.40	\$272.40	\$277.40	\$282.60	\$287.90	<b>\$1,387.70</b>
FTA	\$27.50	\$28.10	\$28.80	\$29.40	\$30.20	<b>\$144.10</b>
<b>TOTAL</b>	<b>\$294.9</b>	<b>\$300.5</b>	<b>\$306.2</b>	<b>\$312.0</b>	<b>\$318.1</b>	<b>\$1,531.8</b>

The following sections discuss the methodology in more detail.

## 3.3 Estimating FHWA Sources

### 3.3.1 Calculate 2022 Regional Revenue Estimates under Both Scenarios

Revenue estimates for the Cincinnati region were developed in fiscal year (FY) 2022 under the FAST Act Scenario and the IIJA Scenario.

#### FAST Act Scenario

To calculate 2022 regional revenue estimates under the FAST Act Scenario, historical regional revenues were sourced from the Ohio-Kentucky-Indiana (OKI) Regional Council of Governments' Transportation Improvement Program (TIP) for FY 2021 through FY 2024. The TIP includes tables of Cincinnati regional revenues for each state in the OKI region. These estimates were developed prior to the enactment of IIJA and therefore reflect the FAST Act Scenario. Federal formula programs were summed for each year and each state in the TIP period. The four-year average across all three states was assumed to be the 2022 funding level under the FAST Act Scenario.

The TIP tables reflect annual expenditures as opposed to annual revenues. It is common for agencies to accumulate a surplus of annual appropriations to pay for larger projects in the future. A four-year average was used to attempt to eliminate some of this annual variability and are therefore assumed to be close proxies to annual state appropriation levels.

#### IIJA Scenario

Annual growth rates for statewide FHWA apportionments for Ohio, Kentucky, and Indiana were calculated over the 2017 through 2020 period. Apportionments from 2021 were excluded in the calculation because of revenue inconsistencies related to the COVID-19 pandemic. These growth rates were then applied to the 2021 state apportionments to forecast through 2026. This methodology assumes the COVID-19 impacts will continue (i.e. lower starting apportionments), but recovery will occur at historical growth rates.

The four-year total of the TIP-reported estimated federal funding for each state (as documented in Section 0.552.1) was divided by the four-year total of the statewide appropriation estimates to calculate regional share of the statewide appropriation. This approach resulted in an estimate of 8 percent for Ohio, 9 percent for Kentucky, and 2 percent for Indiana of total statewide apportionments going to the Cincinnati region. These percentages were applied to the statewide FHWA apportionments for 2022 (reflecting IIJA funding levels) to calculate regional revenues by state, and then summed to get a regional total.

### 3.3.2 Calculate Annual Growth Rates under Both Scenarios, and Forecast Revenues through 2026

Under the FAST Act Scenario, the same historical 2017 through 2020 compound annual growth rate documented in the previous section was used to forecast annual regional revenues building from the 2022 level.

Under the IIJA Scenario, the 2022 regional estimates were grown through 2026 using funding program growth rates identified in IIJA.<sup>4</sup>

The difference in annual revenues under the FAST Act Scenario and the IIJA Scenario is the resulting incremental revenue anticipated from IIJA's passage.

## 3.4 Estimating FTA Sources

Similar to the approach to estimating incremental revenues for FHWA sources, FTA sources were estimated under the FAST Act Scenario and the IIJA Scenario. FTA sources included in this analysis are Section 5307 (Urbanized Area), Section 5304 (Statewide Planning), Section 5339 (Bus and Bus Facilities), and Section 5337 (State of Good Repair).

## 3.5 Estimating FAA Sources

Because FAA funding is not automatically distributed in the way that FHWA and FTA formula funds are, there is no true "baseline" amount the region can expect as a result of the new IIJA programs. However, based on historical averages, CVG can expect approximately \$11.7 million per year through the Airport Improvement Program. Additionally, the IIJA makes available to CVG approximately \$13 million per year through advance appropriations of the new Airport Improvement Grants program, resulting in nearly \$25 million per year in FAA funding available for CVG. Because historic funding levels have not fulfilled the airport's capital investment needs, this new "baseline" funding from the IIJA, coupled with expected future amounts of the AIP program, is planned for backlog projects on airport property. Put another way, although the IIJA more than doubles the funding available to CVG, the existing needs of the airport are sufficient to obligate those funds upon receipt.

## 3.6 Test of Results

To check the credibility of the results, estimated FAST Act funding levels were compared against the current OKI TIP estimates for expenditures of federal funds for the three years of overlap available (FY 2022, FY 2023, and FY 2024). The test shows that the revenue estimates developed for this analysis are within 5% of the fiscally constrained estimates developed by OKI.

Still, this exercise was designed to offer a general sense of baseline funding increases. The numbers shown here should be interpreted as a credible order-of-magnitude estimate based on the information available as of March 2022.

## 3.7 Discretionary Grant Opportunities

From 2009 to 2021, the major USDOT discretionary grant programs (including RAISE/BUILD/TIGER, INFRA/FASTLANE, CRISI) awarded approximately \$16.5 billion in grant funding<sup>5</sup>. The IIJA creates over a dozen new discretionary programs for surface transportation projects. The total discretionary funding available as a result of the new legislation for transportation projects in urban areas like Cincinnati is over \$65 billion from FY 2022 to FY 2026.

<sup>4</sup> Summary statistics drawn from <https://policy.transportation.org/wp-content/uploads/sites/59/2021/09/2021-09-15-AASHTO-Comprehensive-Analysis-of-IIJA-FINAL.pdf>

<sup>5</sup> Does not include FTA opportunities, which historically have distributed discretionary funds as part of broader programs or used other allocation processes.

**Table 10: USDOT Discretionary Grant Opportunities (Federal Highway Administration)**

PROGRAM	5-YEAR FUNDING TOTAL	DESCRIPTION
<b>Bridge Investment Program</b>	\$12.5 billion	Funds available to support projects to improve bridge and culvert condition, safety, efficiency, and reliability. Eligible projects include the replacement, rehabilitation, preservation, or protection of one or more bridges on the National Bridge Inventory.
<b>Congestion Relief Program</b>	\$250 million	Program to advance innovative, integrated, and multimodal solutions to reduce congestion and the related economic and environmental costs in the most congested metropolitan areas with an urbanized area population of at least 1 million.
<b>Healthy Streets Program</b>	\$500 million*	Provides funding to deploy coll and porous pavements and expand tree cover to mitigate urban heat islands, improve air quality, and reduce flood risks.
<b>Grants for Charging and Fueling Infrastructure</b>	\$2.5 billion	Two programs (Community Charging and Corridor Charging) that fund the deployment of electric vehicle charging and alternative fuel locations in publicly accessible locations.
<b>Active Transportation Infrastructure Investment Program</b>	\$1 billion*	Provides competitive connectivity grants that strategically invest in projects that connect active transportation networks, accelerating local and regional plans to create safe and convenient routes to everyday destinations.

\*indicates funding levels authorized by the IJJA but not appropriated.

NOTE: **Bold** Programs are new programs created by the IJJA.

**Table 11: USDOT Discretionary Grant Opportunities (Federal Railroad Authority)**

PROGRAM	5-YEAR FUNDING TOTAL	DESCRIPTION
Federal -State Partnership for Intercity Passenger Rail	\$36 billion in advance appropriations with \$12 billion available for projects outside the Northeast Corridor	Provides funds for capital projects that reduce the state of good repair backlog, improve performance, or expand or establish new intercity rail service.
<b>Railroad Crossing Elimination Program</b>	\$3 billion in advance appropriations with and additional \$2.5 billion potentially available through future appropriations.	Program to mitigate or eliminate hazards at railway crossings.
Consolidated Rail Infrastructure and Safety Improvements (CRISI)	\$5 billion in advance appropriations with potential for additional \$5 billion through annual appropriations.	Funds projects that improve the safety, efficiency, and reliability of intercity passenger and freight rail.

\*indicates funding levels authorized by the IJJA but not appropriated.

NOTE: **Bold** Programs are new programs created by the IJJA.

**Table 12: USDOT Discretionary Grant Opportunities (Federal Transit Authority)**

PROGRAM	5-YEAR FUNDING TOTAL	DESCRIPTION
<b>All Station Accessibility Program</b>	\$1.75 billion	Funds projects to upgrade the accessibility of legacy rail fixed guideway public transportation systems for people with disabilities, including those who use wheelchairs.
Bus and Bus Facilities	\$3.161 billion	Funds projects to replace, rehabilitate, purchase, or lease buses and bus related equipment and to rehabilitate, purchase, construct, or lease bus-related facilities.
Capital Investment Grant Program	\$8 billion in advance appropriations and an additional \$15 billion potentially available through future appropriations.	Supports new and expanded high-capacity rail and bus service. The program includes New Starts for the construction of new systems and expansion of existing systems, Small Starts for projects with capital costs less than \$400 million, and Core Capacity for projects that upgrade existing corridors to handle increased demand.

\*indicates funding levels authorized by the IIJA but not appropriated.  
 NOTE: **Bold** Programs are new programs created by the IIJA.

**Table 13: USDOT Discretionary Grant Opportunities (Federal Aviation Administration)**

PROGRAM	5-YEAR FUNDING TOTAL	DESCRIPTION
Airport Infrastructure Grants	\$15 billion	Funding may be used for airport-related projects defined under the existing Airport Improvement Grant and Passenger Facility Charge criteria.
Airport Terminal Program	\$5 billion	Competitive grants for airport terminal development projects that address the aging infrastructure of the nation’s airports.
Facilities and Equipment	\$5 billion	Funding to replace Air Traffic facilities, update and upgrade equipment including landing and navigational aids, and improve safety, security, and environmental standards at facilities.

**Table 14: USDOT Discretionary Grant Opportunities (Office of the Secretary of Transportation)**

PROGRAM	5-YEAR FUNDING TOTAL	DESCRIPTION
Nationally Significant Multimodal Freight and Highway Projects Program (INFRA)	\$8 billion in advance appropriations with up to \$14 billion available through future appropriations.	The INFRA program awards grants for multimodal freight and highway projects of national or regional significance to improve the safety, efficiency, and reliability of the movement of freight and people in and across rural and urban areas.
Rebuilding American Infrastructure with Sustainability and Equity (RAISE)	\$7.5 billion in advance appropriations, with the potential for up to \$7.5	Provides supplemental funding for grants to states and local entities for projects that will have a significant local/regional impact.
<b>National Infrastructure Project Assistance (MEGA)</b>	\$5 billion in advance appropriations with the potential for up to \$10 billion more in annual appropriations.	Supports large, complex projects that are difficult to fund by other means and likely to generate national or regional economic, mobility, or safety benefits.
<b>Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT)</b>	\$1.4 billion	Supports planning, resilience improvements, community resilience and evacuation routes, and at-risk coastal infrastructure.
<b>Reconnecting Communities Pilot Program</b>	\$1 billion	Restores community connectivity by removing, retrofitting, or mitigating highways or other transportation facilities that create barriers to community connectivity, including to mobility, access, or economic development.
<b>Safe Streets and Roads for All Program</b>	\$5 billion	Provides supplemental funding to support local initiatives to prevent death and serious injury on roads and streets, commonly referred to as “Vision Zero” or “Toward Zero Deaths” initiatives.
<b>National Culvert Removal, Replacement, and Restoration Grant Program</b>	\$1 billion	Provides supplemental funding for grants to replace, remove, and or repair culverts or weirs.
<b>Strengthening Mobility and Revolutionizing Transportation (SMART) Program</b>	\$500 million	Provides supplemental funding to conduct demonstration projects focused on advanced smart city or community technologies and systems in a variety of communities to improve transportation efficiency and safety.

\*indicates funding levels authorized by the IIJA but not appropriated.

NOTE: **Bold** Programs are new programs created by the IIJA.

### 3.7.1 Preparing Competitive Grant Applications

Once the region’s transportation agencies identify candidate projects for specific grant programs, they can begin to strategize the application itself. The following section provides a framework for obtaining information and developing key messages that will help advance competitive applications.

Some federal discretionary funding programs are broad enough to match well with a broad range of capital investment projects, while others are targeted to a very specific functional category or strategic priority. In either case, applicants may be able to improve their chances of securing federal funding by developing a clear understanding of what sets apart a given project or project element, whether it is serving a critical population and/or addressing a clear deficiency of the current transportation network.

Regardless of which discretionary program agencies identify, there are consistent policy objectives targeted by the language in the IIJA, as well as the Department of Transportation Strategic Goals. These policy objectives and strategic goals include:

- *Safety* – investing in improvements to make the transportation system safer for all people.
- *Economic Strength and Global Competitiveness* – growing an inclusive and sustainable economy. Investing in the transportation system to provide American workers and businesses reliable and efficient access to good paying jobs, resources, and markets.
- *Equity*: Reduce inequities. Support and engage people and communities to promote safe, affordable, accessible, and multimodal access to opportunities and services while reducing transportation-related disparities, adverse community impacts, and health effects.
- *Climate & Sustainability*: Tackle the climate crisis by ensuring that transportation plays a central role in the solution. Substantially reduce greenhouse gas emissions and transportation-related pollution and build more resilient and sustainable transportation systems to benefit and protect communities.

Understanding these strategic goals and how projects align with these outcomes will help position projects to be competitive in these extremely popular and frequently oversubscribed programs.

## Elements of Successful Grant Applications

Major federal competitive grant programs typically require a detailed narrative and benefit cost analysis (BCA) as part of the application. The evaluation/selection criteria generally address three functional categories: 1) Existing Conditions, 2) Planning Process, and 3) the Anticipated Benefits of the Proposed Improvements. These categories are summarized in the following sections.

### *Category #1: Existing Conditions*

Existing conditions include metrics related to current operations within a project's study area, such as crash rates, delay, usage, and demographic conditions. It is also important to understand likely changes in the future (such as forecasts for population, employment, and travel demand). These are important data points for several reasons:

1. Many funding programs prioritize projects that serve specific kinds of communities. For example, the USDOT Infrastructure for Rebuilding America (INFRA) discretionary program for fiscal year (FY) 2021 awarded projects that serve Opportunity Zones, Empowerment Zones, Promise Zones, or Choice Neighborhoods. The USDOT's Rebuilding American Infrastructure with Sustainability and Equity (RAISE) discretionary program for FY 2022 focuses on Areas of Persistent Poverty – namely, those areas that consistently had greater than or equal to 20 percent of the population living in poverty or were located in any territory or possession of the United States. Other funding mechanisms prioritize projects that fall within identified urban centers or locations with a strong population or employment base.
2. These existing data points form the basis for defining and estimating the expected benefits of planned infrastructure improvements (No Build versus Build comparison). For example, the most common method of determining safety benefits is through crash modification factors (CMF), which use existing quantitative research to anticipate a reduction in crashes associated with a given improvement. This methodology requires an understanding of both the rate and type of existing crashes. Similarly, many funding programs associated with transit improvements use existing ridership to determine the demand for the proposed improvements. For highway projects, there is a renewed focus on conflict detection and mitigation, signal prioritization, traveler information systems, and other congestion management strategies that are well aligned with TSMO projects.
3. The adopted land-use forecast (and associated travel demand model) can also address questions likely to be asked by funding programs. These forecasts help determine the likely users of the corridor in the future, and funding applications frequently request specific forecasts for population and employment bases as well as expected demand on the corridor.

### *Category #2: Planning Process*

Many funding programs evaluate the process by which the capital project has been identified and defined. The typical emphasis of this evaluation focuses on how the project sponsor has built support with the community, partner agencies, and/or the private sector.

This support can be demonstrated through documentation of the public engagement process, as well as documented outcomes such as funding commitments or letters of support. Both elements can be much easier to strategize during project development – if a particular funding source is a likely target, the project sponsor should work to understand the goals of that source or program. Often, even if the project itself is not a perfect match for the criteria of a specific funding program, the engagement or partnership building efforts of the project can offer a pathway to alignment. For example, many grant programs focus on the involvement and empowerment of disadvantaged communities. As project teams engage with historically underserved communities through the planning and design process, maintaining clear and concise records of that engagement can greatly facilitate future grant applications or funding requests.

Demonstration of the commitment of various partners is also critical in securing funds. This can take the form of obtaining or establishing a pathway toward required approvals (such as NEPA clearances or secured right-of-way). It can also be more generalized support for the project – the more “binding” the agreement, the better. A commitment of funding support or formalized agreements are valuable, but even identifying partners who will endorse the project by providing a letter of support for the application can be very helpful. Additionally, recent USDOT competitive grant applications have requested documentation that projects incorporate considerations of climate change and environmental justice in the planning stage and in project delivery. This includes the use of environmental justice tools, such as EJSCREEN, to help understand and minimize adverse impacts to relevant communities.

### *Category #3: Proposed Improvements*

The final category of positioning for a competitive grant is clearly defining what the project intends to do – the physical improvements, the anticipated cost, and the expected use of the facility. This involves developing a very clear Build scenario to be compared against a No-Build scenario derived from the existing conditions analysis.

The first aspect of defining the proposed improvements is establishing a project definition that is approved by the necessary stakeholders (in many cases, just the sponsor agency). This should include as much detail about the project scope as possible, but at a minimum, it is important to document the specific improvements proposed as well as the exact location and alignment of the project. Many funding sources prioritize certain kinds of improvements – for example, nearly all federal discretionary programs reward “innovative” project elements such as intelligent transportation systems (ITS) and transportation system management and operations (TSMO), or innovative financing or project delivery methods. USDOT has further enhanced their focus on innovation and the extent to which the project incorporates innovative technologies or practices that drive safety, equity, climate and resilience or economic outcomes.

Eligibility for most funding sources also requires a clear implementation plan focused on capital cost estimates and a milestone implementation schedule (NEPA/Preliminary Engineering, final design, right-of-way (ROW), utilities, procurement, and construction). These details help make a case for the “shovel readiness” of a project, which is key to demonstrating the quality of the investment from the perspective of the agency responsible for allocating funds.

Clear documentation of anticipated O&M costs, as well as a plan for paying these lifecycle costs (such as a dedicated O&M fund and/or asset management plan), is another common requirement.

Finally, defining the anticipated benefit categories and level of benefit is critical to making the case for the project in most funding applications. More specifically, the ability to provide monetized analysis results provides a stronger justification than quantitative or qualitative discussions on potential benefits. While monetized benefits are critical to conducting a formal BCA, most funding programs also consider clearly articulated quantitative and qualitative benefits as well.

# 4 Conclusion

The IIJA marks a significant change in the role of federal money in funding transportation infrastructure. In baseline formula-based distributions, the new legislation will direct approximately 25% more federal money to projects in the Cincinnati region – about \$50 million per year. This increase will help address backlog needs and can be part of shaping a new approach to funding transportation projects. However, the transformational opportunity for the region requires a coordinated, proactive approach to leveraging these new funds and pursuing the greatly expanded pool of discretionary programs.

The Connected Region vision can play a critical role in helping to make the most of this new funding opportunity. Phase 2 of this analysis, which will focus on identifying and positioning specific projects for new federal programs, will be a first step toward that goal.



# Appendix A

# APPENDIX A: FULL FUNDING ESTIMATE RESULTS

The funding tables below show the breakdown of funding estimates for each formula-based program included in the analysis. This appendix also includes the incremental change from FAST Act funding levels to those in the IJA. The final table below is a test of the results that compares the estimated FAST Act funding levels against the OKI TIP estimates for expenditures of federal funds for the three overlapping years (FY 2022, FY 2023, and FY 2024). More information regarding the methodology for these estimates is included in Chapter 3 of this report.

## CINCINNATI REGION TOTALS (IJA)

EXISTING FHWA	2022	2023	2024	2025	2026	5-YEAR TOTAL
<b>All Programs</b>	<b>\$234.9</b>	<b>\$239.6</b>	<b>\$244.4</b>	<b>\$249.3</b>	<b>\$254.3</b>	<b>\$1,222.5</b>
National Highway Performance Program	\$134.9	\$137.6	\$140.3	\$143.2	\$146.0	\$702.0
Surface Transportation Block Grant Program	\$65.6	\$66.9	\$68.3	\$69.6	\$71.0	\$341.5
Highway Safety Improvement Program	\$14.0	\$14.3	\$14.6	\$15.0	\$15.3	\$73.3
Railway-Highway Crossings Program	\$1.3	\$1.3	\$1.3	\$1.3	\$1.3	\$6.3
Congestion Mitigation and Air Quality Improvement	\$10.9	\$11.1	\$11.4	\$11.6	\$11.8	\$56.9
Metropolitan Planning	\$1.7	\$1.7	\$1.8	\$1.8	\$1.8	\$8.8
National Highway Freight Program	\$6.5	\$6.6	\$6.7	\$6.9	\$7.0	\$33.7
<b>NEW FHWA</b>						
<b>All Programs</b>	<b>\$32.5</b>	<b>\$32.8</b>	<b>\$33.0</b>	<b>\$33.3</b>	<b>\$33.6</b>	<b>\$165.2</b>
Carbon Reduction Program	\$5.9	\$6.0	\$6.1	\$6.2	\$6.3	\$30.5
PROTECT Formula Program	\$6.7	\$6.8	\$6.9	\$7.1	\$7.2	\$34.6
Bridge Formula	\$17.1	\$17.1	\$17.1	\$17.1	\$17.1	\$85.7
Electric Vehicle Formula	\$2.9	\$2.9	\$2.9	\$2.9	\$2.9	\$14.4
<b>FTA</b>						
<b>All Programs</b>	<b>\$27.5</b>	<b>\$28.1</b>	<b>\$28.8</b>	<b>\$29.4</b>	<b>\$30.2</b>	<b>\$144.1</b>
Sec. 5307 (Urbanized Area) & Sec. 5304 (Statewide Planning)	\$25.0	\$25.5	\$26.2	\$26.7	\$27.4	\$130.8
Sec. 5339 (Bus and Bus Facilities)	\$2.5	\$2.6	\$2.6	\$2.7	\$2.8	\$13.2
Sec. 5337 (State of Good Repair)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1
<b>FAA (allocation cap - not necessarily what will be awarded in reality)</b>						
<b>All Programs</b>	<b>\$24.90</b>	<b>\$24.90</b>	<b>\$24.90</b>	<b>\$24.90</b>	<b>\$24.90</b>	<b>\$124.80</b>
Airport Infrastructure Grants	\$13.7	\$13.7	\$13.7	\$13.7	\$13.7	\$68.6
Airport Improvement Program	\$11.2	\$11.2	\$11.2	\$11.2	\$11.2	\$56.2

**CINCINNATI REGION TOTALS (FAST Act)**

EXISTING FHWA	2022	2023	2024	2025	2026	5-YEAR TOTAL
<b>All Programs</b>	<b>\$211.6</b>	<b>\$216.5</b>	<b>\$221.5</b>	<b>\$226.7</b>	<b>\$231.9</b>	<b>\$1,108.3</b>
<b>NEW FHWA</b>						
<b>All Programs</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>
<b>EXISTING FTA</b>						
<b>All Programs</b>	<b>\$22.8</b>	<b>\$23.5</b>	<b>\$24.2</b>	<b>\$24.9</b>	<b>\$25.7</b>	<b>\$121.1</b>
Sec. 5307 (Urbanized Area) & Sec. 5304 (Statewide Planning)	\$20.3	\$20.8	\$21.3	\$21.8	\$22.3	\$106.5
Sec. 5339 (Bus and Bus Facilities)	\$2.4	\$2.6	\$2.9	\$3.1	\$3.4	\$14.5
Sec. 5337 (State of Good Repair)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1
<b>EXISTING FAA</b>						
<b>Airport Improvement Program</b>	<b>\$11.2</b>	<b>\$11.2</b>	<b>\$11.2</b>	<b>\$11.2</b>	<b>\$11.2</b>	<b>\$56.2</b>

**CINCINNATI REGION TOTALS (Incremental Revenue under IIJA)**

INCREMENTAL REVENUE UNDER IIJA	2022	2023	2024	2025	2026	5-YEAR TOTAL
Existing FHWA	\$23.3	\$23.1	\$22.9	\$22.6	\$22.4	\$114.2
New FHWA	\$32.5	\$32.8	\$33.0	\$33.3	\$33.6	\$165.2
Existing FTA	\$4.7	\$4.6	\$4.6	\$4.5	\$4.4	\$23.0
Existing FAA	\$2.5	\$2.5	\$2.5	\$2.5	\$2.5	\$12.4
<b>Total</b>	<b>\$63.0</b>	<b>\$63.0</b>	<b>\$63.0</b>	<b>\$62.9</b>	<b>\$62.9</b>	<b>\$314.8</b>
<i>Percent Increase over FAST Act Levels</i>	27%	26%	26%	25%	24%	24%

**Check Against Total Federal Funding Expected per TIP**

	2022	2023	2024			3-YEAR TOTAL
TIP FHWA	\$287.0	\$149.5	\$220.3			\$656.9
TIP FTA	\$28.2	\$27.5	\$27.9			\$83.6
<b>TIP Total Estimate</b>	<b>\$315.2</b>	<b>\$177.0</b>	<b>\$248.2</b>			<b>\$740.5</b>
Calculated FHWA	\$211.6	\$216.5	\$221.5			\$649.7
Calculated FTA	\$22.8	\$23.5	\$24.2			\$70.4
<b>Calculated Total</b>	<b>\$234.4</b>	<b>\$240.0</b>	<b>\$245.7</b>			<b>\$720.2</b>
<b>Total Federal Funds Accounted For</b>						<b>97%</b>