



Advancing a road usage charge in Illinois

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Executive summary

Due to the diminishing efficacy of the motor fuel tax as a transportation user fee, and because of long-term investment needs that exceed revenue forecasts, new transportation funding sources are urgently needed to support capital and operating investments in Illinois' transportation system. A well-designed per-mile road usage charge (RUC) can realign transportation funding with transportation use, while also advancing broader funding and policy goals in the state and the northeastern Illinois region.

Local leaders previously supported transitioning to RUC when they adopted the region's comprehensive plan, [ON TO 2050](#), in 2018. Since then, the Illinois Department of Transportation's 2019 [Long-Range Transportation Plan](#), the Chicago Metropolitan Agency for Planning's (CMAP) 2023 [Plan of Action for Regional Transit](#), and the state's Blue-Ribbon Commission on Transportation Infrastructure Funding and Policy have all recommended exploring mileage-based user fees to bolster transportation funding and identify solutions for region-specific transportation challenges. Moreover, the opportunity to transition from the motor fuel tax to a RUC program as a primary transportation funding source provides a once-in-a-generation opportunity to advance regional and state policy priorities that are intrinsically tied to the transportation system. **Therefore, it is prudent for the state, the region, and other partners to work together and take affirmative steps to move RUC forward.**

The next step to advance Illinois for the RUC transition and improve local competitiveness for present-day and future federal funding opportunities is a RUC feasibility study that results in detailed recommendations for implementation. The feasibility study should consider how to:

- Leverage northeastern Illinois' unique position as the center of a Midwestern, tri-state megaregion;
- Support state and regional policy goals related to economic prosperity and greenhouse gas reduction; and
- Address new, innovative RUC-related policy questions.

The feasibility study should also be used to create and build statewide partnerships, which will be instrumental to the successful implementation of future pilot programs and, ultimately, a full-fledged RUC program.

Introduction

By keeping people and goods moving, our transportation system supports the economic vitality and quality of life of northeastern Illinois. But the state and the region have fallen behind in making critical investments. Transportation revenue increases enacted in recent years — including a doubling of the state's motor fuel tax (MFT) rate, indexation of the new MFT rate to inflation, increases to vehicle registration fees, and the use of sales tax revenues collected from motor fuels to fund transit operations — have begun to address these needs, but only temporarily.

Despite being one of the primary funding sources for transportation (including transit), the MFT remains unsustainable, and revenues are diminishing over time. ON TO 2050, the region’s comprehensive plan, originally estimated MFT revenues would increase 1.4 percent annually through 2050, compared to an estimated 2.5 percent annual increase in construction costs. While annual MFT revenues have increased by 1.9 percent on average since 2020, construction costs have grown by nearly 10 percent each year over the same period.

Due to decreasing fuel consumption — driven by increasing vehicle efficiency, new technology, and changing travel patterns — the MFT is also losing its effectiveness as a transportation user fee. Like other user fees — such as vehicle registration fees, which are structured as flat fees — the MFT no longer reflects a user’s true cost of driving. Moreover, it fails to adequately address the societal costs of different vehicle characteristics and levels of roadway usage. Therefore, as part of a broader package of funding solutions for transportation, it is critical that Illinois ultimately replace the MFT. A per-mile RUC can realign transportation funding with transportation use while also advancing broader funding and policy goals.

RUC — also referred to as a vehicle miles travelled (VMT) fee or a mileage-based user fee — is a tax or fee charged to motorists based on the number of miles they drive.¹ RUCs can provide more flexibility than other types of user fees as the transportation system and vehicles evolve. They can assess simple per-mile costs that ensure drivers of all vehicle types are charged similarly, or they can allow for more complex charges to account for user impacts on the transportation system (based on vehicle type or size; roadway type or congestion level; urban, suburban, or rural location; or other factors). RUCs can adapt as vehicles evolve, ensuring that motorists pay for what they use.

Although a RUC program would represent a significant shift in the way Illinois pays for its transportation system, the concept has been studied for decades, and multiple states have successfully implemented programs and/or completed pilot studies in recent years. Leaders in northeastern Illinois demonstrated support for RUC when they adopted ON TO 2050 in 2018. Since then, the Illinois Department of Transportation’s 2019 Long-Range Transportation Plan and CMAP’s 2023 Plan of Action for Regional Transit (PART) have recommended exploring mileage-based user fees and evaluating solutions to region-specific funding challenges. Likewise, in advance of their final report to the Illinois General Assembly (which is scheduled for delivery in January 2026), the Blue-Ribbon Commission on Transportation Infrastructure Funding and Policy approved the recommendation to pilot road usage charging as a long-term replacement for the motor fuel tax.²

Even at the national level, of the possible alternatives to gas taxes, recent efforts prioritized RUC. Nearly 15 years after the National Surface Transportation Infrastructure Financing Commission’s *Paying Our Way* report identified RUC as the best option for generating sustainable transportation revenue, the Infrastructure Investment and Jobs Act (IIJA) authorized a national pilot and established the Strategic Innovation for Revenue Collection (SIRC) program to provide discretionary grants that could support RUC feasibility and pilots at the state, regional, and local levels.^{3 4 5}

The state and the region can take affirmative steps today to move RUC forward and ensure a successful transition in the future. A RUC feasibility study — which would develop detailed recommendations for implementing this revenue collection mechanism and build program structures to achieve a variety of desired co-benefits — represents a first phase in the development and implementation of future pilot programs and, ultimately, a full-fledged RUC program. As the regional comprehensive planning organization for northeastern Illinois, CMAP is well suited to work with the state’s implementing agencies and other stakeholders to conduct the feasibility study and identify considerations requiring further exploration.

This document presents background on the transportation funding dilemma that gives rise to this moment, a framework for future RUC implementation considerations, and RUC-related policy questions for Illinois to explore.

The transportation funding problem

Northeastern Illinois’ transportation funding is generated from a variety of sources, including federal, state, local, and system-generated revenues. Funds are used to construct, operate, administer, and maintain the current roadway and transit system, as well as improve and enhance the system to meet present-day and future transportation needs. Within this broader funding framework, roadway-generated revenues — or user fees — are those funds created by imposing fees to use roadway assets and/or to own and operate vehicles.

The rationale for the collection and use of roadway-generated user fees is the idea that those who benefit from the transportation system should pay for their use of, or impacts on, the system. ON TO 2050 recommends relying on user fees to generate new revenues to create a modern transportation system. Similarly, CMAP’s PART echoed this principle for transit funding to ensure consistency across public funding structures for different transportation modes.

In Illinois, the main roadway-generated transportation revenues are the state MFT and state motor vehicle registration fees. These revenues are principally used to support transportation capital investments, although counties, townships, and municipalities also levy motor fuel taxes and registration fees to support local transportation needs. Additionally, the Northern Illinois Transit Authority (NITA) Act, effective June 1, 2026, will begin to dedicate state sales tax revenues collected on motor fuel purchases to transit operations. However, compared to transportation costs — which are growing at a rate that far exceeds inflation — these revenues remain insufficient to support long-term system needs.

The motor fuel tax is vital in the present but unsustainable in the long-term

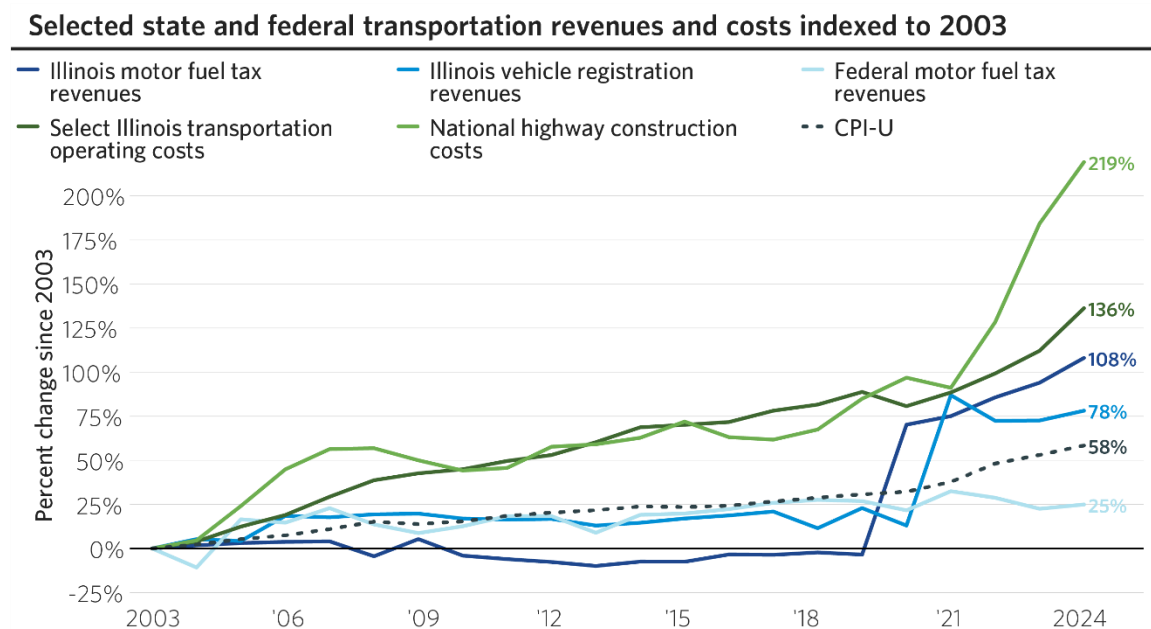
Originally based on the assumption that vehicle fuel purchases mirrored road use, the MFT emerged as a user fee in the early twentieth century alongside the rise of automobile use and ownership. Even before the federal MFT was introduced in 1932 to finance New Deal public works and road-building projects, states relied heavily on MFTs to provide matching funds for federal highway investments.⁶

However, systemic issues have contributed to declining revenues and structural limitations that make fuel-based revenue sources inadequate for maintaining and operating an evolving transportation system.

1. **Flat MFT rates have resulted in stagnant MFT revenues.** Historically, many MFT rates were not set up to grow with inflation and have not been updated to grow with transportation costs. As a result, revenues have not kept pace with transportation costs (Figure 1).

In 2019, Illinois began to address this issue with Rebuild Illinois, the statewide capital funding program. Rebuild Illinois doubled the state MFT rate to 38 cents per gallon and indexed the 19-cent increase to inflation, consistent with ON TO 2050 recommendations. (As of July 1, 2025, the composite Illinois MFT rate is \$0.483 per gallon.) However, the federal MFT and many local MFT rates remain flat. And, despite the actions taken via Rebuild Illinois, state MFT revenues have continued to grow at a slower rate than transportation costs. CMAP analysis of data from the National Highway Construction Cost Index shows that highway construction costs grew by more than 60 percent between 2020 and 2024, while Illinois MFT revenues and inflation only grew by 23 percent and 20 percent, respectively. Simply put, even the state’s inflation adjusted MFT is no longer able to maintain buying power over time.

Figure 1. Motor fuel tax revenues continue to fall behind transportation costs



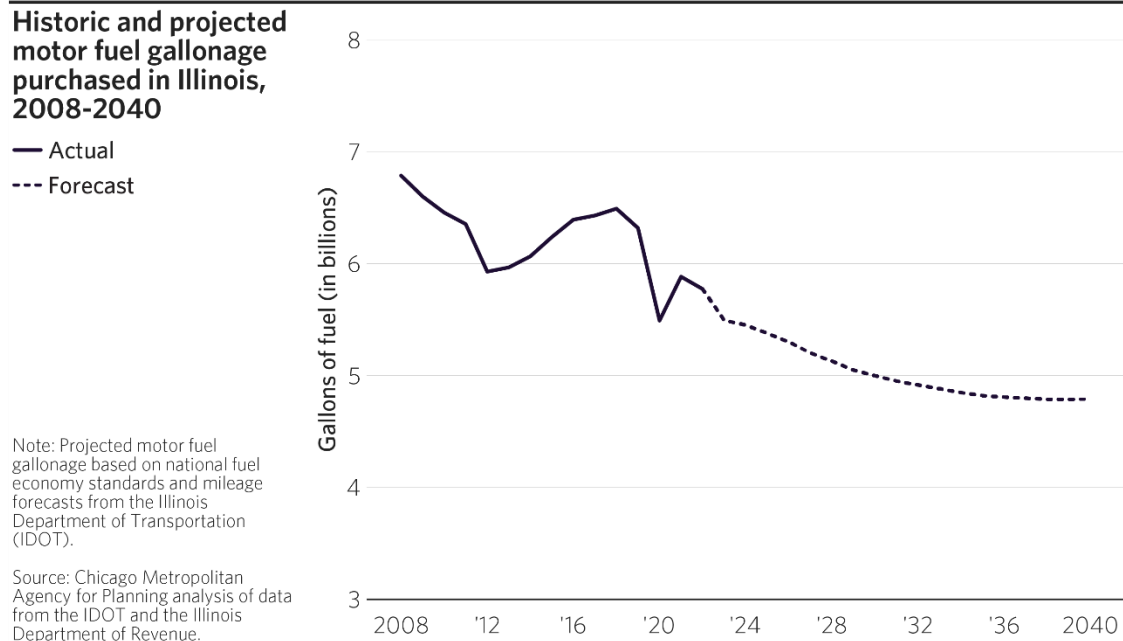
- Notes:
1. Federal transportation revenue excludes revenue for 2009 from the American Recovery and Reinvestment Act.
 2. Transportation operating costs include those incurred by IDOT’s District One, Illinois Tollway, RTA, and all transit service boards.
 3. National highway construction costs are based on the National Highway Construction Cost Index, for which the base year is 2003.
 4. CPI-U is the Consumer Price Index for All Urban Consumers in the Chicago-Naperville-Elgin, IL-IN-WI Metropolitan Statistical Area.

Source: Chicago Metropolitan Agency for Planning analysis of data from the Illinois State Toll Highway Authority, Federal Highway Administration, State of Illinois, Regional Transportation Authority, U.S. Bureau of the Fiscal Service, and U.S. Bureau of Labor Statistics.

2. **The MFT is no longer an effective user fee.** The primary mechanism that historically made the MFT an effective transportation user fee — fuel consumption — has been in decline since 2007 and is neither aligned with road usage nor sufficient to meet roadway maintenance needs. Fuel consumption has continued to decline in recent years and is projected to continue decreasing as vehicle efficiency standards are improved and electric vehicles (EVs) become more common (Figure 2).^a

Due to the “rebound effect,” declines in fuel consumption — which effectively lower the costs of driving — are anticipated to increase both VMT and roadway congestion.⁷

Figure 2. Motor fuel consumption is projected to decline indefinitely



3. **Disparities are emerging between drivers of more and less fuel-efficient vehicles.** Motorists who drive less fuel-efficient vehicles bear a heavier burden relative to their actual road usage than those who drive more fuel-efficient vehicles. This burden primarily affects two groups in northeastern Illinois: lower-income households, which tend to drive more miles and own fewer, older vehicles, and rural households, which own more and older vehicles but drive fewer miles on average than urban households (Table 1). In both cases, these households pay higher MFT amounts relative to their travel behavior, while higher-income and urban households’ payments more closely reflect the choice and/or ability to purchase newer, more fuel-efficient vehicles. These

^a This trend will impact MFT revenues, as well as sales tax revenues from motor fuel, which are now a primary funding source for transit operations following the adoption of the NITA Act.

disparities will continue to widen as electric and highly fuel-efficient vehicles increasingly penetrate the market.

Furthermore, current policy efforts to offset reductions in state MFT revenues associated with EVs — such as the annual in-lieu-of-motor-fuel-tax registration surcharge of \$100 instituted through Rebuild Illinois — typically represent less than the average motorist would pay each year in motor fuel tax.^b

Table 1. Low-income and rural drivers in the Chicago Metropolitan Statistical Area (MSA) own older vehicles than high-income and urban drivers, which is currently the greatest indicator of road user costsⁱ

	Average weekly miles	Average vehicle count	Average vehicle age
Midwest region drivers			
Overall average	246.0	2.8	10.5
Low-income	248.2	2.4	12.6
Medium-income	247.6	2.7	10.3
High-income	241.2	3.1	8.8
Urban	245.2	2.6	9.7
Rural	247.6	3.1	12.0
Chicago MSA driversⁱⁱ			
Overall average	252.9	2.3	8.7
Low-income	325.5	1.8	11.0
Medium-income	301.0	2.2	7.9
High-income	172.5	2.7	8.5
Urban	261.6	2.2	8.5
Rural	155.2	3.5	10.2

Notes:

- i. Based on the categories used by the National Household Travel Survey, households are defined as low-income if they have an annual income less than \$50,000; middle-income if they have an annual income that is greater than or equal to \$50,000 but less than \$125,000; and high-income if they have an annual income that is greater than or equal to \$125,000. The breaks between these categories generally align with the 2023 area median income thresholds for 50 percent and 120 percent of the area median income, or \$55,000 and \$132,000 per year, respectively.
- ii. Due to a decreased sample size in the 2022 National Household Travel Survey, the Federal Highway Administration (FHWA) was unable to compute and release statistically valid estimates for geographics lower than Census division. Consequently, the smallest geography for which they made data available is Census division divided by size and the presence of heavy rail. For this analysis, it is assumed the only MSA in the East North Region with a population greater than one million and the presence of heavy rail is the Chicago-Naperville-Elgin, IL-IN-WI MSA.

Source: Chicago Metropolitan Agency for Planning analysis of data from the 2022 FHWA National Household Travel Survey.

^b Using the 2025 Illinois motor fuel tax rate and the average number of miles driven per household from the 2022 National Household Travel Survey, CMAP estimates the typical driver in the Chicago Metropolitan Statistical Area pays \$200 annually.

4. **Other flat fees do not account for roadway impacts.** Beyond the MFT, other transportation user fees structured as flat fees do not account for vehicle characteristics, actual impacts on the roadway system, or drivers' ability to pay. This inflexibility will pose an even greater challenge as vehicles become heavier, which is anticipated to cause increased roadway damage and generate additional maintenance needs. EVs, in particular, are heavier than their gas-powered predecessors.⁸ Existing replacement fee structures, including the state EV registration surcharge, will likely be insufficient to cover these added maintenance costs.

An Illinois RUC feasibility study sets the stage for a transportation funding solution

Given that the correlation between existing roadway user fees and transportation costs has been deteriorating for some time, there is a need for more sustainable, responsive, and dynamic funding sources. In response to persistent capital needs across the regional transportation system, as well as cyclical transit operating funding challenges, ON TO 2050 and PART both explored ways to strengthen transportation funding in northeastern Illinois. Both plans recommend the eventual replacement of the MFT with RUC.

A RUC program would not only realign transportation funding with road use, but also introduce greater flexibility into the funding structure to advance other transportation- and climate-related goals. Accordingly, stakeholders from across the state and the region should work in partnership to undertake a RUC feasibility study.

Notably, Illinois and the Midwest are behind the curve in exploring mileage-based user fee policies (Figure 3). Additionally, not all RUC programs are created equal — design and implementation has considerable impact on the benefits that can be realized. For example, programs that rely solely on annual manual odometer readings do not provide tools to address congestion and can result in large lump-sum payments that may be difficult for low-income households to absorb. Conducting a feasibility study will therefore provide the state and region with an opportunity to define the goals, objectives, and priorities that should shape future RUC pilots and program development. Doing so will require CMAP and the state to engage a broad coalition of stakeholders not only in the feasibility study, but also future phases of RUC exploration and implementation.

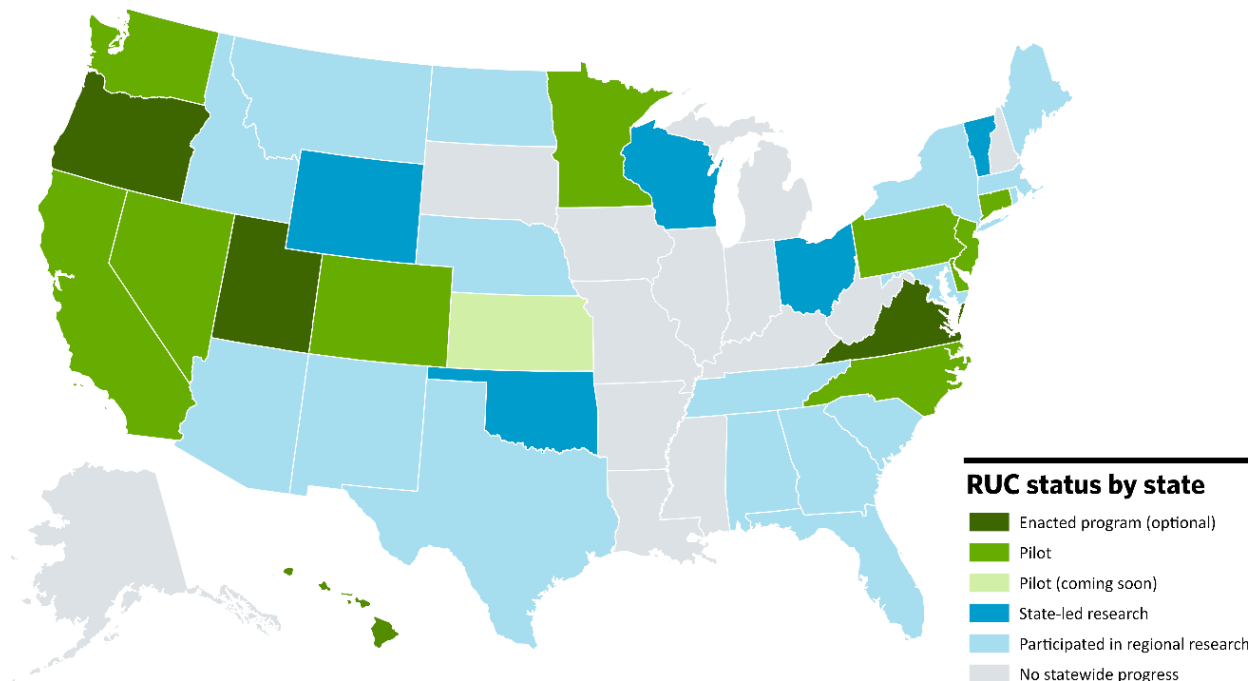
Altogether, to provide a framework for future RUC implementation efforts, any feasibility study should address the following areas, which are discussed in further detail in subsequent sections:

- A. **Determine program design and implementation:** produce detailed recommendations for the design and implementation of future pilot programs and, ultimately, a full-fledged RUC program.

- B. Address opportunities for innovation:** account and advocate for northeastern Illinois' unique position as the center of a Midwestern, tri-state megaregion, which presents opportunities to explore unresolved RUC-related policy questions.
- C. Support state and regional policy goals:** consider how RUC can be structured to support goals related to economic prosperity and greenhouse gas reduction, while achieving desired co-benefits such as improved mobility and safety and stronger support for transit.

Given recent momentum around RUC — including the authorization of a national pilot — Illinois has an opportunity to contribute to the broader dialogue and provide input based on its unique context. A completed feasibility study, coupled with a broad coalition of support, would place Illinois and the Chicago metropolitan area in a stronger position to pursue future RUC programming.

Figure 3. Many states have studied and/or implemented road usage charge programs



Source: CMAP analysis of Eno Center for Transportation materials.

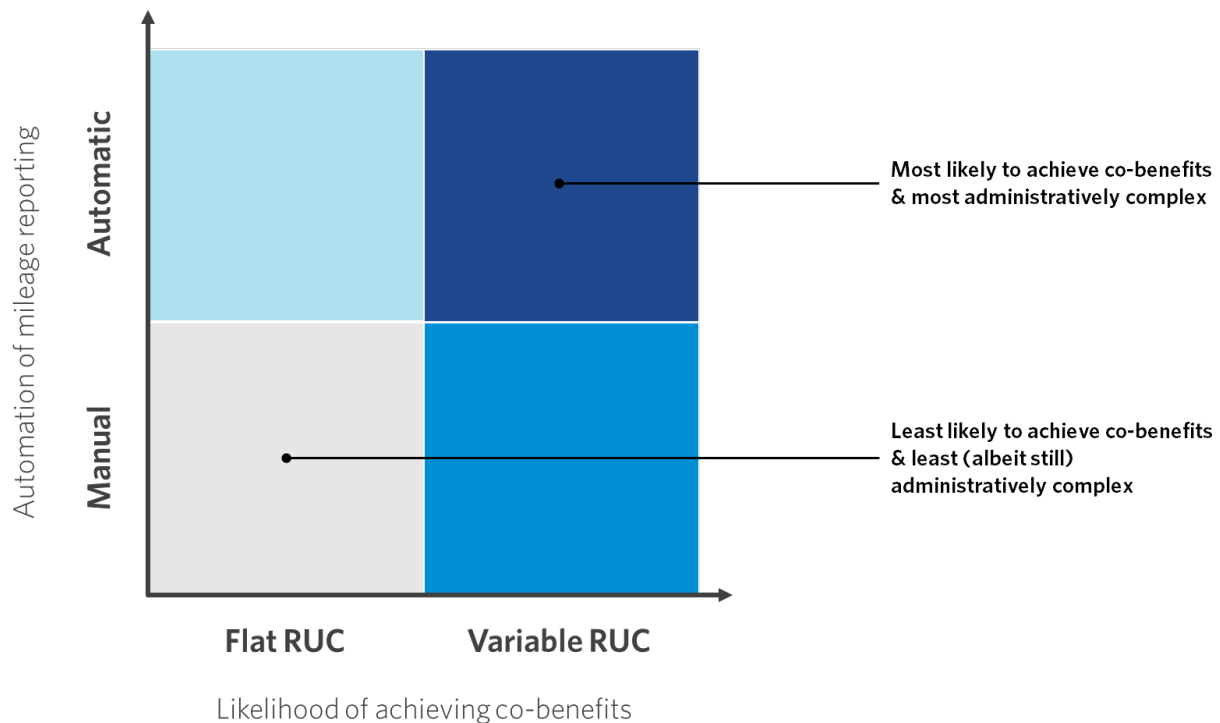
A. Determine program design and implementation

The opportunity to secure sustainable transportation funding is one of the central motivating factors for transitioning from the MFT to RUC. However, any future RUC program must ensure that it can generate sufficient revenues, balance administrative burdens and costs with desired outcomes, and advance other complementary policy benefits.

While many RUC options exist, implementation pathways can generally be grouped on two ends of a spectrum: a flat RUC, which charges the same amount per mile driven for all drivers, and a variable RUC, which allows for complex charges that incorporate users' specific impacts on the transportation system (such as vehicle type, size, or weight; roadway type or congestion level; geographic context; or other factors). Similarly, RUC can be administered through manual mileage reporting (a manual RUC) or using technology to automatically report vehicle mileage (an automatic RUC) (Figure 4).

At the outset, it may appear prudent to simply implement a flat RUC using existing revenue collection processes, such as manual odometer readings conducted alongside mandated emissions testing. However, taking the time to consider a more dynamic, automated RUC could reap additional long-term benefits. Compared to a flat, manual RUC, a variable, automated RUC would provide the opportunity to create a system that adapts to actual roadway system impacts, the transportation system's needs, and the evolving nature of roadway vehicles. It could also be sufficiently flexible to advance future regional and state policy priorities that may not yet be fully defined.

Figure 4. There are many options for structuring, implementing, and administering a RUC program, in terms of administrative complexity and the ability to realize other co-benefits for the transportation system



Regardless of the approach, each RUC model presents its own administrative challenges and fairness considerations. Appendix 1 outlines how different RUC categories could calculate and administer user fees, along with related policy and privacy considerations. A RUC feasibility

study should build on this comparison and develop recommendations for modeling and evaluating RUC options through pilot programs.

B. Address opportunities for innovation

RUC research and demonstration efforts have been underway in several states over the past two decades, with public-facing pilots accelerating in recent years. Through a feasibility study, Illinois can draw on existing knowledge to design and deploy future pilots more efficiently. Additionally, a feasibility study will allow Illinois to weigh policy considerations that remain unresolved and/or are unique to our context. Doing so would contribute to the national body of knowledge on RUC programs and strengthen future applications for federal funding through programs such as the IJJA's SIRC.⁹

Figure 3 summarizes the status of RUC programs in states across the country, and Appendix 2 displays characteristics of key pilot programs conducted in recent years. Some states, such as Utah and Oregon, have moved beyond the pilot phase into permanent programs, though participation remains optional and limited. More ambitious efforts are emerging. Hawaii passed legislation requiring RUC for EVs beginning in 2025, representing the country's first mandatory RUC implementation and a program that would eventually extend to all vehicles. Other states continue to conduct pilots addressing outstanding policy questions. For example, California recently launched a pilot using global positioning systems to distinguish between public and private roads for collection purposes.

Locally, there are unique opportunities to explore additional policy areas. Illinois is well-positioned to consider the advantages of RUC alongside unresolved questions:

- How to leverage RUC to mitigate congestion through location-based reporting mechanisms
- How to integrate RUC with tolling and broader road pricing strategies, in coordination with agencies like the Illinois State Toll Highway Authority (including how to address institution-specific implementation considerations)
- How to ensure cross-jurisdictional interoperability by layering local, state, and federal VMT fees
- How to support multi- and cross-state coordination and RUC administration
- How to ensure fairness by accounting for additional vehicle characteristics beyond a per-mile charge, such as vehicle weight, value, and age

C. Support state and regional policy goals

Transitioning from the MFT to a RUC program presents a once-in-a-generation opportunity to advance other regional and state policy priorities that are intrinsically tied to the transportation system. In addition to improving access and reducing greenhouse emissions, the region is also experiencing a traffic safety crisis, and ON TO 2050 encourages implementers and their partners to pursue a comprehensive set of strategies to protect the most vulnerable travelers.

RUC could help mitigate congestion and complement existing road pricing strategies while also generating additional co-benefits. For example, RUC may encourage shifts from single-occupancy vehicles to transit and other transportation alternatives, such as micromobility and active modes, reducing emissions that contribute to air pollution and improving safety. Due to their flexibility, RUCs can also be more responsive to affordability concerns and local funding needs than the existing MFT, improving mobility for low-income, transit-dependent, and other disadvantaged populations. A RUC feasibility study should prioritize these policy considerations when designing future RUC approaches.

Although state and federal roadway revenues are generally not used to support transit, there have long been calls for increased flexibility to fund multimodal transportation investments. As discussed in ON TO 2050 and PART, advancing a well-integrated regional transportation system requires both roadway investments and a reliable, well-funded transit system. Managing congestion in northeastern Illinois requires improvements and enhancements to roadway infrastructure, but also an attractive and reliable alternative to single occupancy vehicles: a well-maintained, well-operated, and well-funded transit system.

Recent changes implemented in the NITA Act — which now directs state sales taxes collected on motor fuel purchases to transit agencies in Illinois and dedicates interest income from the Road Fund and State Construction Account to transit capital projects — represent important progress. At the same time, these changes expose transit funding to the same long-term risks associated with fuel-based revenues.

Implementing RUC — which would represent a significant shift in how Illinois funds transportation infrastructure — provides an opportunity to mitigate these risks across all transportation modes and preserve recent funding advances. Given that RUC should be part of a broader multimodal congestion management strategy, a feasibility study should consider how best to support transit and maintain balance across transportation funding structures.

Conclusion

Existing transportation user fee revenues are neither sustainable nor sufficient to meet the needs of the transportation system. New, flexible revenue sources tied directly to roadway use and impacts are urgently needed. A RUC program that charges motorists based on the number of miles they drive, rather than the number of gallons of fuel they purchase, could better position the region's transportation funding for the long term.

Even with the considerable work done in other states to demonstrate RUC's capabilities, key questions related to the most suitable RUC implementation and administration strategies for Illinois remain. Advancing RUC will require the state, CMAP, and other regional and statewide stakeholders to work collaboratively to conduct a RUC feasibility study. This partnership would support the development of key recommendations, inform future pilot programs, and identify implementation considerations that must be explored before RUC can evolve from a concept to policy.

Finally, it is critical that any future RUC program be structured to advance broader policy goals. Transitioning from the MFT to RUC offers an opportunity to improve the financial sustainability of the transportation system while supporting regional and state priorities: encouraging mode shift, managing congestion, reducing VMT and greenhouse gas emissions, improving safety, and supporting more balanced user fees. Achieving these outcomes will require an ambitious and thoughtfully designed RUC program. Therefore, beyond evaluating the various options available for calculating and administering road usage fees, a RUC feasibility study will be instrumental in determining how to best pursue and achieve regional, state, and federal priority policy outcomes.

Endnotes

¹ Federal Highway Administration, “Vehicle-Miles Traveled (VMT) Fees,” Center for Innovative Finance Support, https://www.fhwa.dot.gov/ipd/tolling_and_pricing/defined/vmt.aspx.

² Illinois Department of Transportation, “Commission Meeting, October 21, 2025,” Blue-Ribbon Commission on Transportation Infrastructure Funding and Policy, October 21, 2025, <https://idot.illinois.gov/content/dam/soi/en/web/idot/documents/transportation-system/planning/blue-ribbon-commission/10-21-25-brc-meeting.pdf>.

³ National Surface Transportation Infrastructure Financing Commission, *Paving Our Way: A New Framework for Transportation Finance* (2009), [https://www2.itif.org/NSTIF Commission Final Report.pdf](https://www2.itif.org/NSTIF_Commission_Final_Report.pdf).

⁴ The White House, *A Guidebook to the Bipartisan Infrastructure Law for State, Local, Tribal, and Territorial Governments, and Other Partners* (2022), <https://www.whitehouse.gov/wp-content/uploads/2022/05/BUILDING-A-BETTER-AMERICA-V2.pdf#page=50>.

⁵ Garrett Shrode et al., *Driving Change: Advice for the National VMT-Fee Pilot* (Eno Center for Transportation, 2023), <https://enotrans.org/wp-content/uploads/2023/09/Driving-Change-Advice-for-the-National-VMT-Fee-Pilot.pdf>.

⁶ Lyman Stone, “When Did Your State Adopt Its Gas Tax?” Tax Foundation, July 16, 2014, <https://taxfoundation.org/data/all/state/when-did-your-state-adopt-its-gas-tax>.

⁷ Tom Wenzel and K. Sydney Fujita, *Elasticity of Vehicle Miles of Travel to Changes in the Price of Gasoline and the Cost of Driving in Texas* (Ernest Orlando Lawrence Berkeley National Laboratory, 2018), <https://eta-publications.lbl.gov/sites/default/files/lbnl-2001138.pdf>.

⁸ Henry Grabar, “Ford’s New F-150 Could Be a Milestone for Electric Vehicles. There’s Just One Problem.” *Slate*, May 21, 2021, <https://slate.com/business/2021/05/ford-f150-lightning-electric-weight.html>.

⁹ The White House, *A Guidebook to the Bipartisan Infrastructure Law for State, Local, Tribal, and Territorial Governments, and Other Partners*.

Appendix 1. RUC program design details and policy considerations

		Variable RUC, automatic	Variable RUC, manual	Flat RUC, automatic	Flat RUC, manual
Program details	How are fees calculated?	Mileage & other factors		Mileage only	
	How is mileage reported?	Technological device (i.e., plug-in, smartphone, in-vehicle)	Manual validation (i.e., odometer readings, self-reporting)	Technological device (i.e., plug-in, smartphone, in-vehicle)	Manual validation (i.e., odometer readings, self-reporting)
	What is the administrative burden and cost?	The burdens and costs of using technological devices to report mileage are not well understood and additional information is needed. Since investment surely will be required to implement an automatic RUC, a variable rate would best ensure the full spectrum of co-benefits are realized. There could be opportunities to partner with the Tollway to lower burdens on drivers and implementers.	Manual validation poses high burdens on drivers (to report) and/or implementers (to validate). The costs of manual validation are not well understood and may exceed expectations. Additional information is needed.	The burdens and costs of using technological devices to report mileage are not well understood, and additional information is needed. Given the level of investment required to implement an automatic RUC, a flat rate would not realize the full spectrum of co-benefits available. There could be opportunities to partner with the Tollway to lower burdens on drivers and implementers.	Manual validation poses high burdens on drivers (to report) and/or implementers (to validate). The costs of manual validation are not well understood and may exceed expectations. Additional information is needed.
Policy considerations	Revenue sustainability	A RUC is more financially sustainable than the MFT.			
	Mobility	Greater revenue sustainability will support a better user experience across all modes, including transit.			
		More nuanced charges and data collection <u>can</u> account for roadway type, congestion level, etc. to improve congestion in real-time.	Without time and location-based data collection, RUC <u>cannot</u> mitigate congestion.	Without nuanced charges, RUC <u>cannot</u> mitigate congestion.	Without nuanced charges, RUC <u>cannot</u> mitigate congestion.
	Environmental sustainability	More nuanced charges can reduce VMT and/or incentivize the use of more active transportation modes, which in turn can contribute to emissions reductions.	Charges that varied based on vehicle characteristics (e.g., fuel efficiency) could align with some policy goals. However, without time and location-based data collection, some policy levers to reduce emissions are limited.	Without nuanced charges, RUC cannot directly contribute to emission reductions.	Without nuanced charges, RUC cannot directly contribute to emission reductions.
	Equity	Ensures drivers who travel the same number of miles are charged similarly.			
	Charges can be structured to account for vehicle characteristics and ability to pay. Changes can be made to align with evolving goals.	Charges can be structured to account for vehicle characteristics and ability to pay. Changes can be made to align with evolving goals.	A flat rate RUC would not account for characteristics like ability to pay.	A flat rate RUC would not account for characteristics like ability to pay.	
Privacy	Privacy concerns related to automatic mileage reporting are more significant when rates require more granular data on location, time, etc. These can be addressed in program design (i.e., mileage records, location validation, and time-of-day information can be administered by a third party and deleted automatically after a designated period).	There are limited privacy concerns associated with manual mileage validation.	Privacy concerns related to automatic mileage reporting exist but are less pronounced when only mileage is recorded. These can be addressed in program design (i.e., mileage records can be deleted automatically after a designated period).	There are limited privacy concerns associated with manual mileage validation.	

Appendix 2: Pilot program characteristics

	Pilot programs					Pilot programs turned permanent and/or voluntary programs			
Details	Minnesota	California	Colorado	Washington	Eastern Transportation Coalition	Oregon	Utah	Virginia	Hawaii
Dates	Sept 2011 - Oct 2012	Jul 2016 - Mar 2017	Dec 2016 - Apr 2017	Feb 2018 - Jan 2019	May 2018 - Jul 2018	Pilot programs: 2006 - 2007, 2012 - 2013 Permanent program: Jul 2015 - present	Jan 2020 - present	2020 - present	2018 - 2022; Permanent program: EVs in 2025, all vehicles by 2033 ⁱⁱⁱ
Participants	500	±5,000	147	2,000	155	±700 drivers and ±2,100 vehicles ⁱ (in pilot)	±5,000 (2023)	20,000 (2023)	2,000 (in pilot) All EVs (2025)
Rate (cents per mile)	1.0 - 3.0	1.8	1.2	2.4	0.76 - 2.65 ⁱⁱ	Original: 1.5; Current: 2.0	1.11	Varies	0.8
Simulated Charge or Real	Reimbursed	Simulated	Simulated	Simulated	Simulated	Real	Real	Real	Real
Mileage reporting options^{iv}									
<i>Plug-in device (GPS)</i>		x	x	x	x	x	x	x	x
<i>Plug-in device (non-GPS)</i>		x	x	x	x	x		x	x
<i>Odometer reading</i>		x	x	x		x			x
<i>Smartphone app</i>	x	x		x		x	x		x
<i>Smartphone paired with in-vehicle device</i>					x			x	
<i>Time permit</i>		x							
<i>Mileage permit</i>		x		x					
<i>Telematics (factory installed, on-board systems)</i>		x				x	x	x	
Preparation time									
<i>Between legislative authorization & operations</i>	4 years	27 months	NA	NA	2 years	23 months	NA	2 years	2 years
<i>Task force / study group work prior to operations</i>	2 years	3 years	9 years	6 years	NA	14 years before permanent program (including pilots)	NA	NA	2 years
Cost	\$5 million (“M”)	\$8.97M	No data	\$8.5M	No data	Pilot programs: \$2.9M, \$1.9M Permanent program: \$5.4M	\$6.5M	No data	\$8.5M

Notes:

- i. The legislation for Oregon’s permanent voluntary program caps the number of vehicles at 5,000 (which has not yet been exceeded) and outlines a schedule for future rate increases.
- ii. The Eastern Transportation Coalition rate varies by state. See page 54: <https://tetcoalitionmbuf.org/wp-content/uploads/2020/07/2018-Coalition-Passenger-Pilot-Final-Report.pdf>.
- iii. Recent legislation will require RUC for EVs beginning in 2025. An implementation plan for extending RUC to all vehicles is forthcoming.
- iv. A March 2019 report from the National League of Cities describes and analyzes various mileage reporting options – also known as metering methods – including the advantages and disadvantages of each. See pages 31-35: https://www.nlc.org/sites/default/files/2019-03/CSAR_MBUF%20report%20updated032619_pages.pdf

Source: CMAP analysis of state/program websites, 2025.



The Chicago Metropolitan Agency for Planning (CMAP) is the region’s comprehensive planning organization. The agency and its partners developed and are now implementing ON TO 2050, a long-range plan to help the seven counties and 284 communities of northeastern Illinois implement strategies that address transportation, housing, economic development, open space, the environment, and other quality-of-life issues.

See cmap.illinois.gov for more information.

