

# 2023-24 NCDOT Statewide Customer Service Survey

## Final Report



**NCDOT Project 2023-34  
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# ITRE

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**RESEARCH &  
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16. Abstract <p>The North Carolina Department of Transportation (NCDOT) offers a wide range of transportation services across the state, catering to various functions and needs. Customer satisfaction is a key priority for NCDOT, as outlined in the department's Strategic Plan. Since 2015, NCDOT has measured customer service through a statewide survey that focuses on gathering feedback from customers about aspects important to the department. This ongoing survey provides valuable insights that help enhance customer satisfaction and track progress in alignment with NCDOT's mission and goals.</p> <p>This summary presents the findings from the 2023-24 survey, completed by over 1,000 North Carolina residents. Conducted in the fall of 2024, the survey employed both a convenience sampling method and an oversampling approach to ensure inclusion of typically underrepresented populations.</p>			
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## Executive Summary

The North Carolina Department of Transportation (NCDOT) delivers a wide range of transportation services to meet the needs of residents across the state. Prioritizing customer satisfaction, as outlined in the department's Strategic Plan, NCDOT has been conducting the statewide survey since 2015 to gather feedback on key services and programs of interest. These annual surveys provide valuable insights that help enhance customer satisfaction and measure progress in alignment with NCDOT's mission and objectives.

This document outlines the results of the 2023-24 survey (referred to as the “2024” survey in this document) conducted in August and September of 2024. Over 1,100 North Carolinians participated, with responses collected through an opt-in convenience survey and a targeted oversampling effort. The survey methodology alternates annually between a convenience sample and a random sample. Additionally, the 2023-24 survey included targeted oversampling to better capture input from demographic groups that are typically harder to reach.

Overall, 74% of participants reported being satisfied with NCDOT services, a slight decrease from 2023. Personal vehicles remain the primary mode of transportation, with 71% of respondents using them every day, signifying a return to pre-pandemic travel levels. Alternative modes such as bicycles, public transit, and ferries see more limited usage. While personal vehicles are used at a higher rate, pedestrian and bicycle mode usage is consistent. Respondents highlighted infrastructure and safety concerns as potential barriers to increased use.

# Disclaimer

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# Demographics

Survey respondents were asked to identify the demographic categories that best described them, using classifications consistent with the United States Census Bureau's American Community Survey. A total of 1,143 individuals participated, including 642 responses from the convenience survey. Additionally, an oversampling effort of 500 individuals was conducted to better reflect the demographic composition of North Carolina's adult population. This effort specifically focused on increasing representation among historically underrepresented groups, including individuals aged 18 to 24 and 25 to 34, as well as those identifying as Black/African American or Hispanic. As a result, the survey sample more accurately aligns with North Carolina's demographic makeup. This oversampling effort has been conducted since 2019.

The following data presents a summary of the direct participant demographics for both the convenience sample as well as the oversampling effort. The state-level data utilized to measure representation is based on United States Census data and NC State Demographer projections and only includes the adult population.

## Gender

- **Males:** 47.9% of North Carolina, 47.8% of survey respondents
- **Females:** 52.1% of North Carolina, 52.2% of survey respondents

## Age

- **18-24 Years:** 12.6% in North Carolina, 7.6% of survey respondents
- **25-34 Years:** 16.5% in North Carolina, 11.2% of survey respondents
- **35-44 Years:** 16.6% in North Carolina, 15.1% of survey respondents
- **45-54 Years:** 16.4% in North Carolina, 21.7% of survey respondents
- **55-64 Years:** 16.1% in North Carolina, 19.4% of survey respondents
- **65 or Older:** 21.9% in North Carolina, 25.1% of survey respondents

## Race

- **White/Caucasian:** 71.1% of North Carolina, 71.7% of survey respondents
- **Asian or Pacific Islander:** 3.5% of North Carolina, 2.0% of survey respondents
- **Native American including Alaskan Native:** 1.6% of North Carolina, 1.0% of survey respondents
- **Black/African American:** 20.3% of North Carolina, 18.3% of survey respondents
- **Hispanic/Latino:** 9.8% of North Carolina, 7.0% of survey respondents

# Survey Adjustments

The Statewide Customer Service Survey has been conducted annually since 2015 and has undergone various updates over the years to ensure it remains accessible, current, concise, and easy to complete. At the same time, the research team has prioritized maintaining consistency to enable year-over-year comparisons of the data. Below is a summary of significant changes made to the survey:

- 2019: Significant overhaul and restructuring of survey to streamline time needed to take survey
- 2020: Changes to questions with sensitivity to COVID-19 pandemic
- 2021: Tuning of question wording and formatting; some COVID-19 related questions and response options were maintained. Questions regarding accessibility to transportation infrastructure were added
- 2023: DMV section removed to avoid redundancy

In 2024, the survey team worked with mode leads at NCDOT to gain feedback on how the survey could collect information more useful for them and contained up-to-date information. As a result, mode-specific sections were updated to ensure not only a superior experience for the survey participant but for NCDOT employees who may use the collected data for analysis as well. Furthermore, questions regarding aviation were removed from the survey as the Department of Aviation already collects data through their own channels.



# Overall Satisfaction Rate

The overall customer satisfaction rate for the 2024 survey participants was 74%.

This is a decrease from 78% in 2023. However, it is important to note that 2023’s survey solely utilized a random sampling method, and satisfaction rates in years where a convenience sample was used is consistently lower. The last time a convenience sample was utilized was in 2021; the satisfaction rate was 71%. This satisfaction rate is compared to that of previous survey years in Figure 1, below.

The research team recommends using caution when comparing satisfaction across years, as survey methods and questions have changed over time.

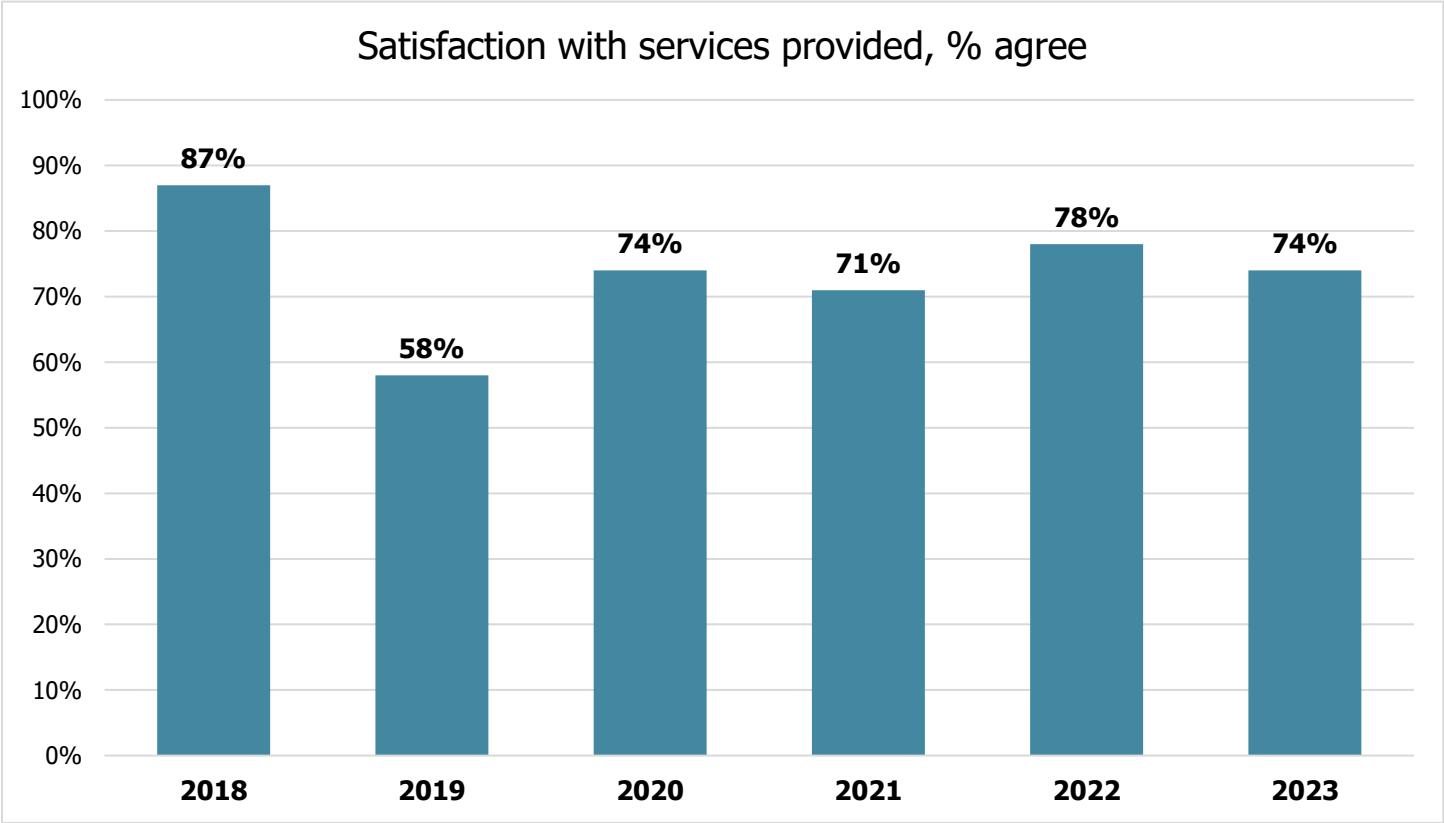


Figure 1. Satisfaction with NCDOT services by year

# Overall Responses

The following section outlines the results of the convenience and oversampling effort conducted through this study. Note that not all participants responded to all questions and the sample size of respondents therefore may vary from question to question; percentages may not equal 100% due to multiple response questions and rounding.

## Satisfaction

Overall, 74% of respondents said they were satisfied with transportation services in North Carolina.

## Primary Mode

Respondents reported their primary means of transportation as follows:

- **91.0%** of respondents use a **personal vehicle** as their primary means of transportation (84.5% as a driver and 6.5% as a passenger).
- **2.5%** use a **work vehicle**
- **2.5%** use a **personal bicycle**
- **1.2%** walk
- **1%** use **public transportation**
- **<1%** use **pay-to-use bicycles or scooters**
- **<1%** use **ferries**
- **1%** use **another mode** as a primary means of transportation

## Overall Mode Use

Respondents were asked how frequently they used each mode of transportation. The majority of respondents (71%) reported using a personal vehicle every day; only 7% of respondents had not driven a vehicle in the past year. While only roughly 1% of respondents reported walking, jogging, or running as their primary mode of transportation, half of respondents reported walking, jogging, or running at least once a week. While regular shared motor vehicle use is minimal, over half (54%) of respondents reported using this mode in the past year. Figure 2, and Table 1, below, shows frequency of use for each mode.

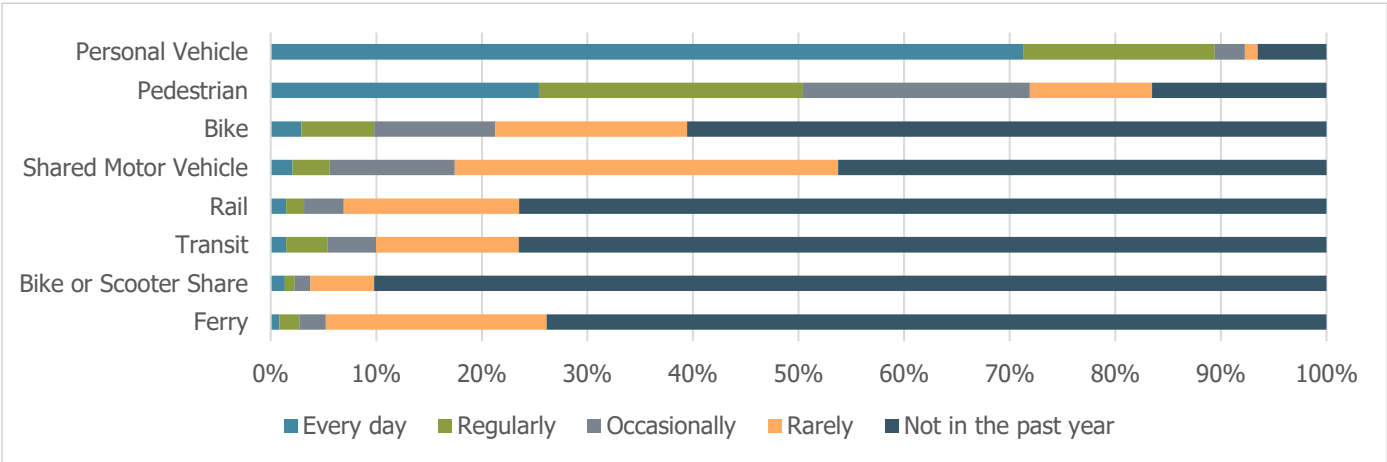


Figure 2. Mode Use



Table 1. Mode Use with Percentages

	Personal Vehicle	Pedestrian	Bike	Shared Motor Vehicle	Rail	Transit	Bike or Scooter Share	Ferry
Every day	71.3%	25.4%	2.9%	2.1%	1.5%	1.5%	1.4%	0.8%
Regularly	18.1%	25.0%	6.9%	3.5%	1.7%	4.0%	0.9%	1.9%
Occasionally	2.9%	21.5%	11.5%	11.8%	3.8%	4.6%	1.5%	2.5%
Rarely	1.2%	11.6%	18.2%	36.3%	16.6%	13.5%	6.1%	20.9%
Not in the past year	6.5%	16.5%	60.5%	46.3%	76.5%	76.5%	90.2%	73.9%

## Service Priorities

Respondents rated the following services as those that should receive the most emphasis over the next two years:

- Maintenance of roadways **(26.3%)**
- Safety of roadways **(21.5%)**
- New construction of roadways **(16.8%)**
- Pedestrian transportation **(10.0%)**
- Trains **(8.2%)**
- Local/public/city buses **(6.7%)**
- Bicycle transportation **(6.3%)**
- Airports **(3.9%)**
- Ferries **(0.9%)**

Compared to 2023, more respondents saw pedestrian transportation as a service that should receive more emphasis. Additionally, the maintenance, safety, and new construction of roadways remain the most important priorities for North Carolinians.

# Key Findings

In addition to the overall results described in previous sections, the research team identified survey results of interest related to travel trends and patterns identified in the data. These findings are described in the following sections.

## Transportation Infrastructure Support

In 2021, four new questions were introduced to assess respondents' perceived access to and support from North Carolina's transportation infrastructure. In 2024, 60% of respondents reported having sufficient access to the transportation system, reflecting an increase from 2023 but a decrease compared to 2021.

Additionally, 55% stated they do not encounter barriers when using their preferred transportation mode, with fewer respondents facing such barriers in 2024 than in 2023. However, a slightly smaller proportion of respondents reported access to a usable and reliable vehicle compared to 2023, though the vast majority (94%) still indicated they had access to a vehicle. Despite these declines, 72% of respondents in 2023 felt supported by North Carolina's transportation system, marking an improvement over both 2021 and 2023.

Consistent with previous results, respondents with lower income overall indicated that they have less access to a usable and reliable vehicle compared to respondents with higher income. Sixty-seven percent of respondents earning less than \$25,000 a year said they have access to a vehicle, versus 95% for respondents earning between \$25,000 and \$49,999. Ninety seven percent of respondents who earn \$50,000 or more have access to a usable and reliable vehicle.

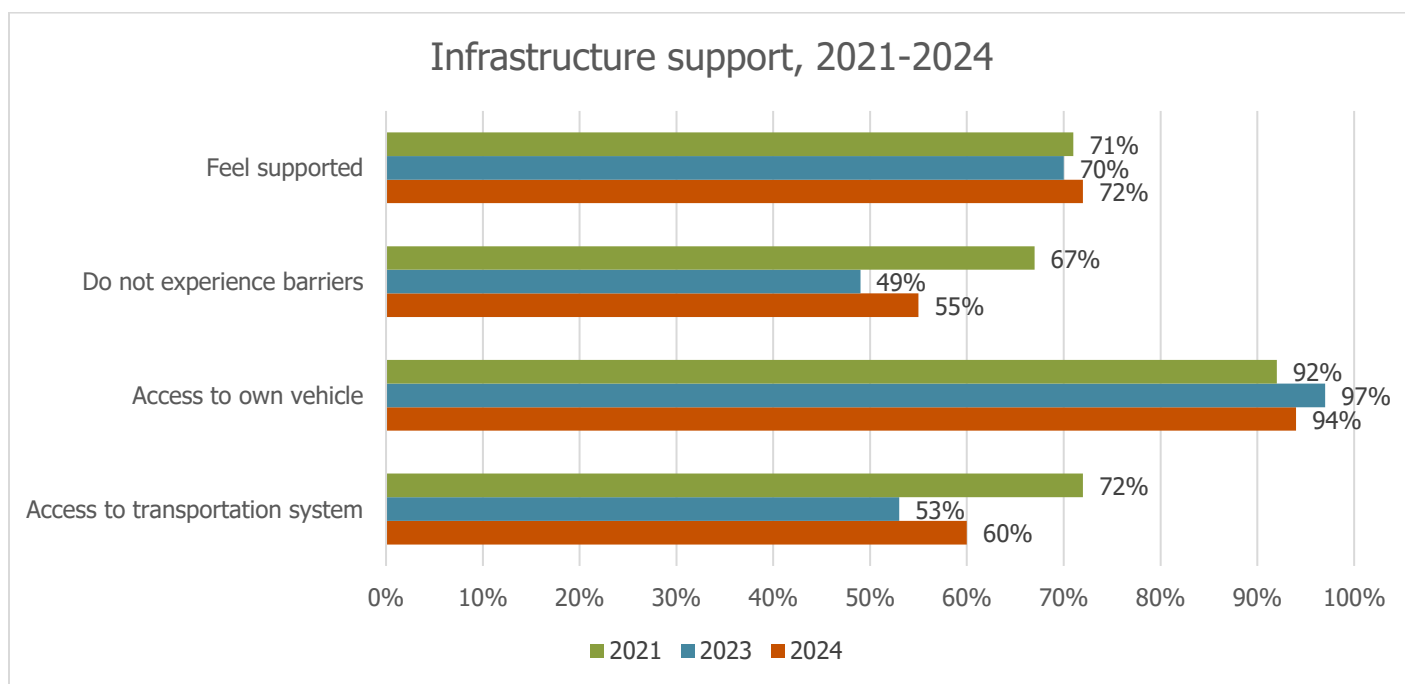


Figure 3. Infrastructure support in 2021, 2023, and 2024

## Personal Vehicle Use by Year

Seventy one percent of respondents reported using a personal vehicle every day in 2024, which is equivalent to daily usage prior to the COVID-19 pandemic. In comparison to 2023, more respondents are driving daily versus several times a week. It is possible that the shift from regular to daily use is a result of a shift away from at-home or hybrid work schedules. These results are presented in Figure 4, below.

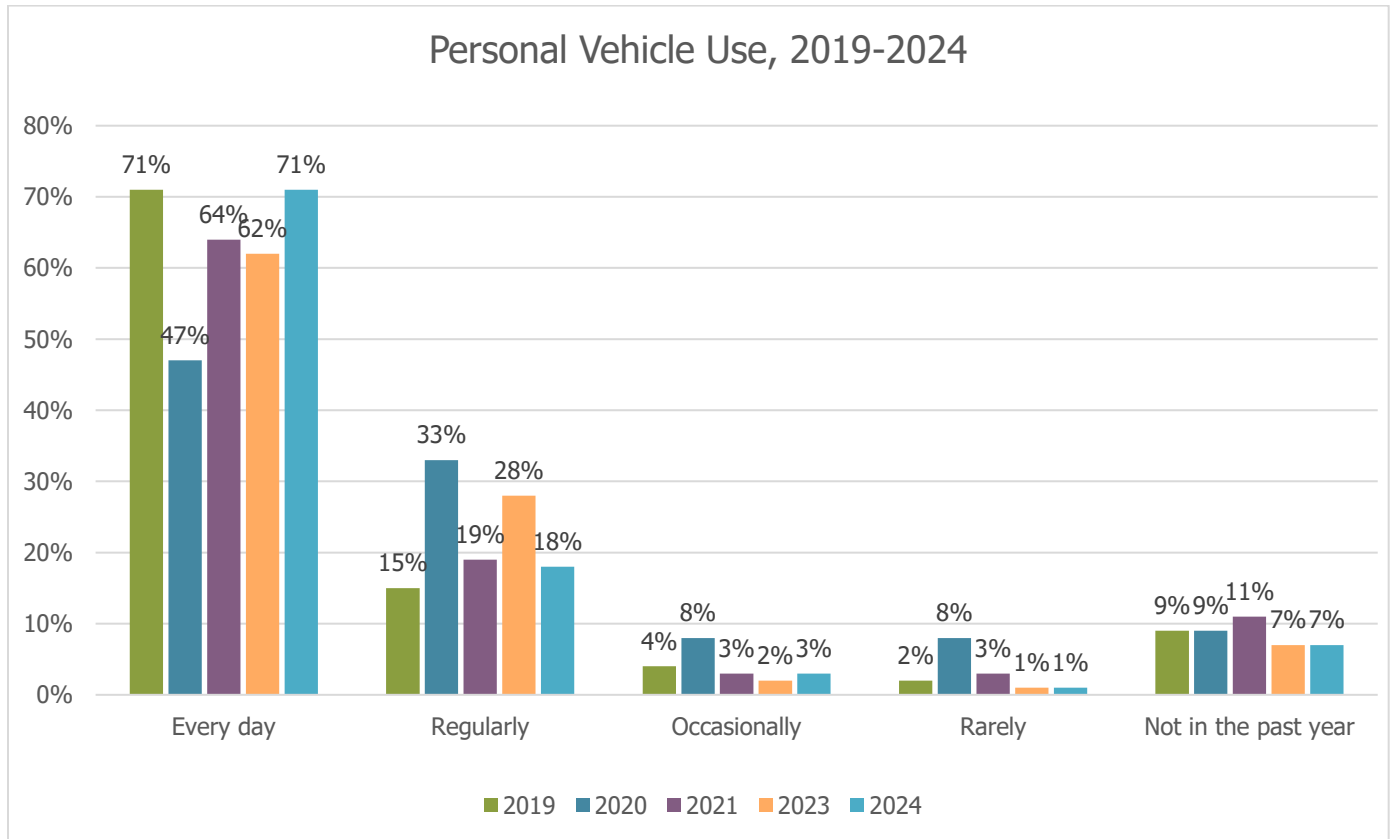


Figure 4. Personal vehicle use by year, 2019-2024

## Variance by Income

Primary transportation mode varied across household income brackets. Respondents were asked to report their total household income before taxes and deductions. Those in lower income groups were less likely to drive a personal vehicle compared to higher income respondents and were more likely to travel as passengers. This trend may be attributed to the financial challenges of owning a vehicle or the relative affordability of sharing rides due to fuel costs. Additionally, lower-income respondents reported walking and using public transit at higher rates than those in higher income brackets. Figure 5 below illustrates the primary modes of transportation by household income.

## Primary Mode of Transportation by Household Income

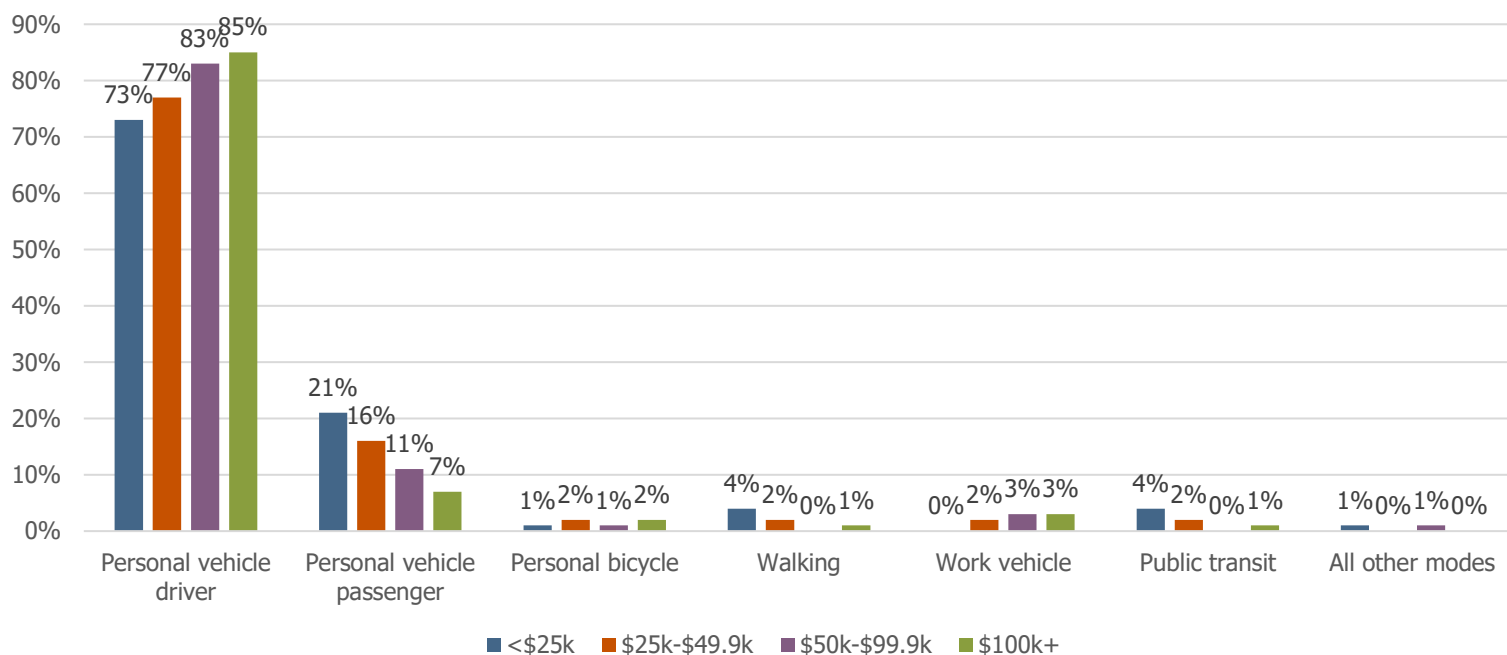


Figure 5. Primary mode of transportation by income

## Satisfaction by Mode/Unit

Modal satisfaction shifted slightly between 2023 and 2024. Satisfaction for motor vehicles, rail, public transit, pedestrian, and bicycle modes all increased from 2023; ferry satisfaction decreased. It is important to note that ferry, rail, and public transit are more likely to have significant shifts in satisfaction due to lower sample sizes. Satisfaction levels for bicycle and pedestrian modes are historically the least satisfactory, while motor vehicle and rail consistently are ranked higher. Figure 6, below, shows satisfaction by mode in 2024.

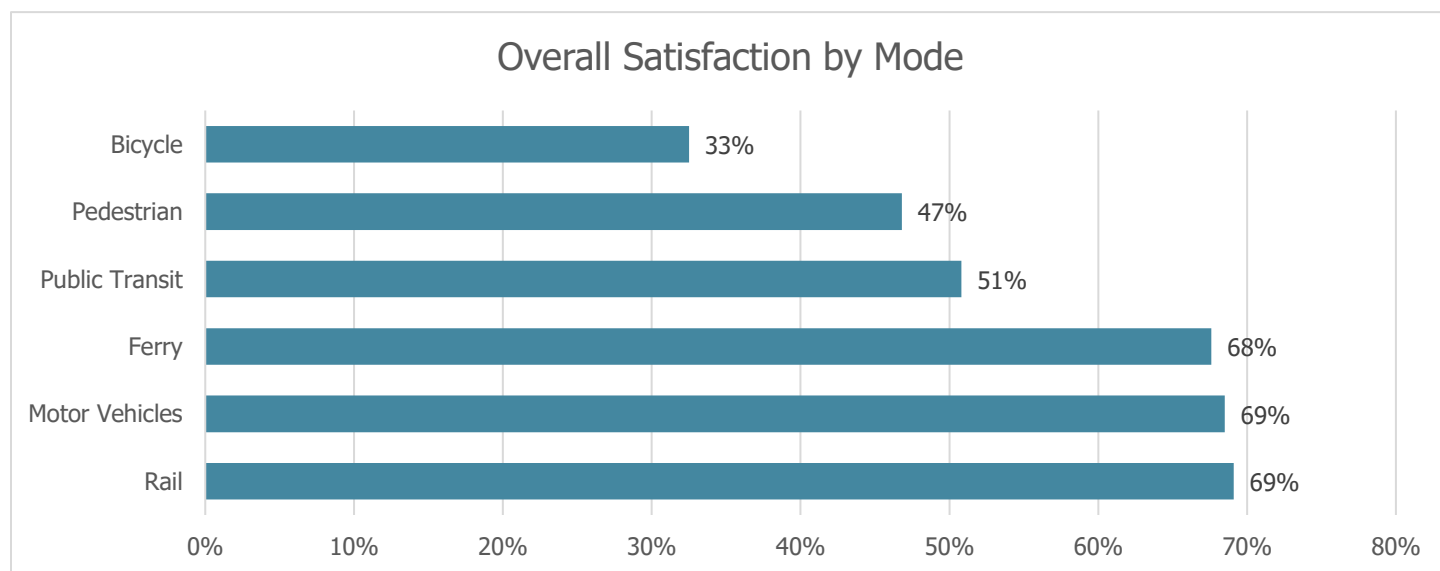


Figure 6. Satisfaction by Mode

# Results by Mode

The survey also included both mode-specific and general agency-level questions, the results of which are described in the following section. It is important to note that for some modes, the number of respondents who used the mode has a low sample size. Table 2, below, shows the number of respondents for each mode.

Table 2. Number of respondents using each mode

	Used within past year	Not used within past year
Personal vehicle	1070	66
Walking/jogging/running	934	200
Bicycle	448	695
Ferry	297	830
Transit	260	851
Rail	284	854

## NCDOT Communications

Respondents indicated that electronic message boards on highways were the most effective way for NCDOT to provide information on traffic conditions and roadway projects. Additionally, 15% of respondents thought that signs on roadways were effective. Social media, text messaging, and email were also commonly cited as effective communication methods. These results are mostly proportionally consistent previous years, however local TV was a less popular option than in previous years.

In 2024, respondents were overall less aware of various NCDOT campaign and outreach efforts. Consistent with 2023, NC by Train and NCDOT Now were the best known campaigns. Figure 7, below, shows how aware of each campaign or outreach effort.

### Top 5 most effective ways to provide information:

- 16% Electronic Message Boards
- 15% Signs on Roadways
- 13% Social Media
- 11% Text Messages
- 10% Email

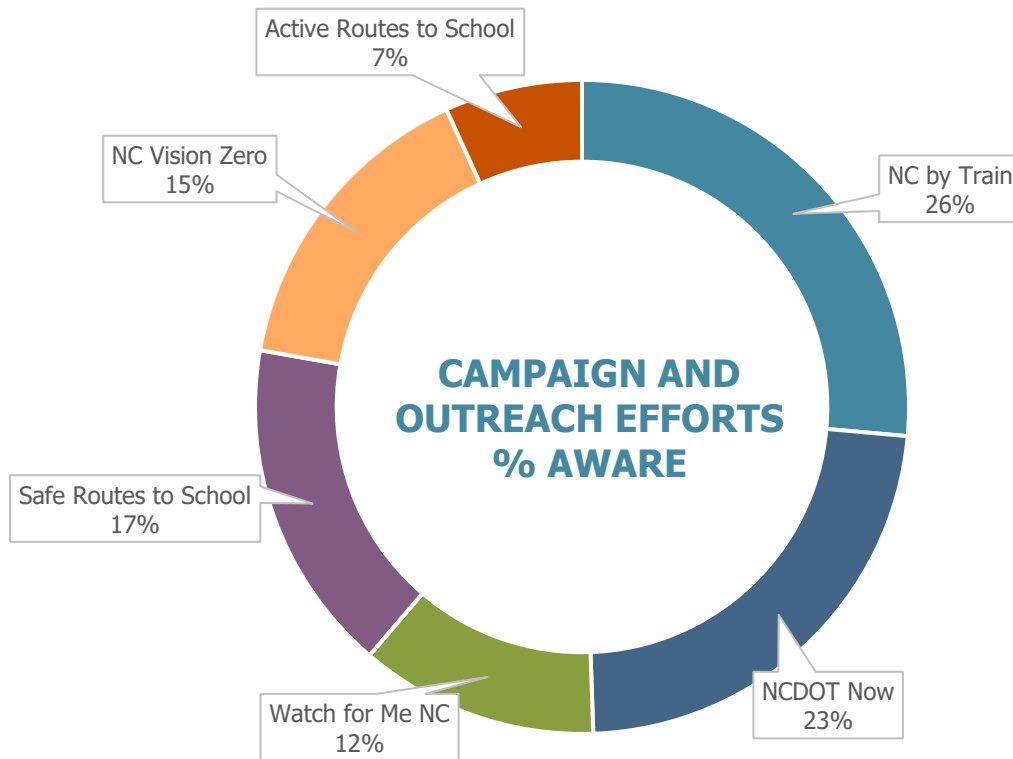


Figure 7. Campaign and Outreach Efforts - percent aware

## Personal Vehicle Drivers and Passengers

In 2024, 71% of respondents reported driving or riding in a personal vehicle daily, marking a 9-point increase from 2023. This is the first year since the COVID-19 pandemic that daily driving rates have returned to pre-pandemic levels.

The median time spent in a vehicle was reported as approximately 45 minutes on Tuesday and Thursday, 40 minutes on Saturday, and 30 minutes on Sunday. Respondents spent less time in a vehicle overall than in 2023 and 2021. This is displayed in Figure 8, below.

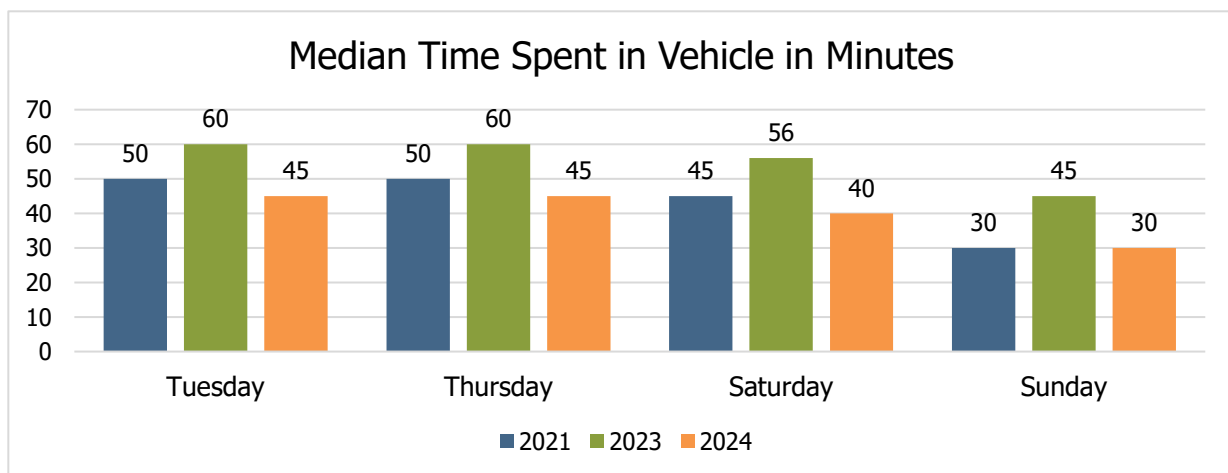


Figure 8. Median time spent in vehicle in minutes: 2021-2024



Respondents most commonly reported utilizing apps like Waze and Google Maps to make decisions about their commute (33%). Additionally, respondents relied on their past experience with roads in the area they typically travel in (27%). To better accommodate their schedule and avoid congestion, respondents change the time they leave for work or home (40%) or change the route they travel (34%). More respondents have made some type of adjustment versus in 2023 and in 2021, further indicating a shift from remote and hybrid work schedules to in-office schedules. Respondents who lived in metropolitan areas such as Wake, Mecklenburg, and Guilford counties represented a higher proportion of respondents who made some change to their commute in response to congestion.

Sixty-nine percent of respondents were satisfied with all services, on average. Respondents felt most dissatisfied with smoothness of highway and interstate surfaces (54% satisfied), the overall flow of traffic (57% satisfied), and they delay time in work zones on highways and interstates (59% satisfied). These results are consistent with previous years proportionally, although satisfaction is higher overall.

Respondents were most satisfied with the visibility of informational and warning signs along highways and interstates (78%), the reliability of road networks (77%), and the safety of highways and interstates (69%).

Respondents rated the condition of highway and interstate surfaces (26%), safety of highways and interstates (24%), and overall flow of traffic on highways and interstates (23%) as the three services that should receive the most attention from NCDOT. These are consistently rated as the top three most important services each year.

Of respondents who did not use a motor vehicle at least occasionally in the past year, the most frequently cited reasons were lack of interest or need (63%) and lack of personal resources such as the cost of gas or a vehicle (37%).

#### Top 3 most important vehicle services:



- Condition of highway and interstate surfaces (26%)
- Safety of highways and interstates (24%)
- Overall flow of traffic on highways and interstates (23%)

## Bicyclists

Roughly 40% of respondents reported riding a bicycle at least once in the past year. Among respondents who reported riding a bicycle at least a couple of times a year, 55% typically rode a bicycle for exercise or recreation. Twenty five percent of respondents reported bicycling to visit friends or family, and 20% rode a bike to run general errands. The average reported length of a bicycle ride was around thirty minutes.

Respondents who said they did not ride a bicycle in the past year cited safety concerns (42%), lack of interest (41%) and lack of areas to bike (38%) as their primary reason for not bicycling more or at all.

This mode historically has the lowest satisfaction rates, which was consistent in 202. The average satisfaction rate across all categories was 33%. Expectations were best met for condition of bike paths (43%). Eighty percent of respondents reported that the safety of bike lanes as well as the availability of bike paths did not meet their expectations.

Respondents rated connectivity of bike lanes, wide shoulders, and bicycle-friendly shared lanes (27%); availability of bicycle paths (20%); and safety of bike lanes, shared-lanes, separated paths, and wide shoulders (11%) as the three services that should receive the most attention over the next couple of years.

### Top 3 most important bicycle services:



- Connectivity of bicycling facilities (27%)
- Availability of bicycle paths (20%)
- Safety of bicycling facilities (11%)

## Pedestrians

Eighty-three percent of respondents said that they have walked, jogged, or run on a sidewalk, greenway, or walkway at least once in the past year; half of respondents walk, jog, or run at least a few times a week.

Most respondents reported walking, jogging, or running for exercise or recreation (32%), walking their pet (14%), or shopping and dining (13%). The average length of a walk, jog, or run was 17 minutes. Respondents in metropolitan areas walked, ran, and jogged more than respondents in rural areas. This is consistent with results from 2023 and 2021.

Across all categories, 47% of respondents rated pedestrian services as either meeting or exceeding their expectations. Respondents were most satisfied with the availability of crosswalks or pedestrian signals (50%). Respondents were least satisfied with the availability of infrastructure for all pedestrians, such as children and people with disabilities (41%).

The three transportation areas that respondents indicated should receive the most emphasis over the next two years were the safety of walkways, sidewalks, or crossing locations (26%), access to walkways and sidewalks (24%), and infrastructure that supports use by all pedestrians, including children, persons with

### Top 3 most important pedestrian services:



- Safety of pedestrian walkways, sidewalks, or crossing locations (26%)
- Access to walkways and sidewalks (24%)
- Infrastructure that supports use by all pedestrians, including children, persons with disabilities, and senior adults (17%)

disabilities, and senior adults (11%).

## Public Transportation (Small sample size)

Twenty four percent of respondents reported riding a public, local, or city bus in the past year. Only 5% of respondents utilized public transit regularly or daily. As a result, these sample size for this mode is small and results should be utilized with the appropriate context.

Respondents most frequently used buses in the morning and in the evening.

Thirty percent of respondents reported that they were not interested in riding the bus. Twenty seven percent of respondents said that they did not use the bus more because there were not enough routes to get them where they needed to go. Over half (51%) of respondents said that the addition of routes that meet their needs would lead them to use a public/local/city bus more frequently.

Overall, 51% of respondents indicated that their expectations were met or exceeded, an increase from 2023. Respondents were most dissatisfied with weather protection at bus stops (29% satisfied) and how long it takes the bus to get them where they need to go (35%). Respondents were most satisfied with the comfort and safety of buses (75%).

Respondents rated access to public/local/city buses (22%), the weather protection at bus stops (19%), and how long it takes the bus to get places (15%) as the three services that should receive the most attention over the next two years.

### Top 3 most important bus services:



- Access to public/local/city buses (22%)
- Weather protection at bus stops (19%)
- How long it takes the bus to get places (15%)

## Passenger Train (Small sample size)

Twenty four percent of respondents reported riding a train in North Carolina in the past year. Three percent of respondents reported riding a train on a regular basis, or more frequently. Because of the small sample size for this mode, results should be utilized with the appropriate context.

Respondents most frequently used trains to visit friends or family (20%), to travel for work (15%), and for recreation such as tourism (14%).

Thirty-seven percent of respondents reported not traveling by train more often because of a lack of routes where they need to go. An additional 17% reported that they are not interested in riding a train.

Respondents would be more likely to use a train if there were more routes that went where they needed to travel (45%) or if there were train stations closer to them (30%). Thirty-six percent of respondents reported

### Top 3 most important rail services:



- Frequency of trains servicing desired route (25%)
- Ease of connection with other public transportation (17%)
- Reliability/timeliness of passenger trains (10%)

that they would be more likely to ride a train if there was a train station within a 30-mile radius of their location; 29% were unsure if they would, and 21% reported that they would not.

In terms of what rail services NCDOT should focus on, respondents rated the frequency of trains servicing their desired route (25%), the ease of connection with other public transportation (17%), and the reliability/timeliness of passenger trains (10%) as the three most important services.

## Ferries (Small sample size)

Twenty six percent of respondents said they rode a ferry in North Carolina in the past year, which is consistent with previous years. Respondents reported not riding a ferry more frequently because they did not need to cross water to reach their destinations (80%) or were not interested (18%).

Across all services, satisfaction was 68%. As previously stated, satisfaction for modes with smaller response rates are more likely to fluctuate year-over-year. Respondents were most satisfied with the cost of ferry tickets (79%) and least satisfied with the reliability/timeliness of the ferry schedule (58%).

Respondents rated the reliability and timeliness of ferry service (20%), convenience of ticketing and reservation options (16%), and cost of ferry tickets (9%) as the services that should receive the most emphasis from NCDOT over the next two years.

### Top 3 most important ferry services:



- Reliability/timeliness of ferry service (20%)
- Convenience of ticketing and reservation options (16%)
- Cost of ferry tickets (9%)

# Conclusion

Now in its eighth iteration, the Statewide Customer Service Survey continues to serve as a vital resource for capturing the experiences and perspectives of North Carolinians on transportation throughout the state.

Overall, 74% of respondents expressed satisfaction with NCDOT services, a slight decline from 2023. Personal vehicles remain the predominant mode of transportation, with 71% of participants reporting daily use, reflecting a return to pre-pandemic travel patterns. In contrast, alternative modes of transportation such as bicycles, public transit, and ferries are used less frequently. While pedestrian and bicycle usage remains steady, respondents identified infrastructure and safety issues as key obstacles to broader adoption of these modes.

Results continue to show disparities in transportation habits, predominately related to household income level. Respondents continue to highlight the need for investment in roadways, safety, and infrastructure to support a diverse range of transportation modes.

The introduction of new questions in 2021 to measure accessibility to the transportation system, along with ongoing updates to the survey, demonstrates its ability to evolve and address NCDOT's priorities effectively. The survey serves as a tool for capturing both long-term, longitudinal trends and emerging transportation patterns, ensuring it remains relevant and insightful.

The research team recommends further longitudinal observation to ensure the viewpoints and experiences of North Carolinians continue to be captured

