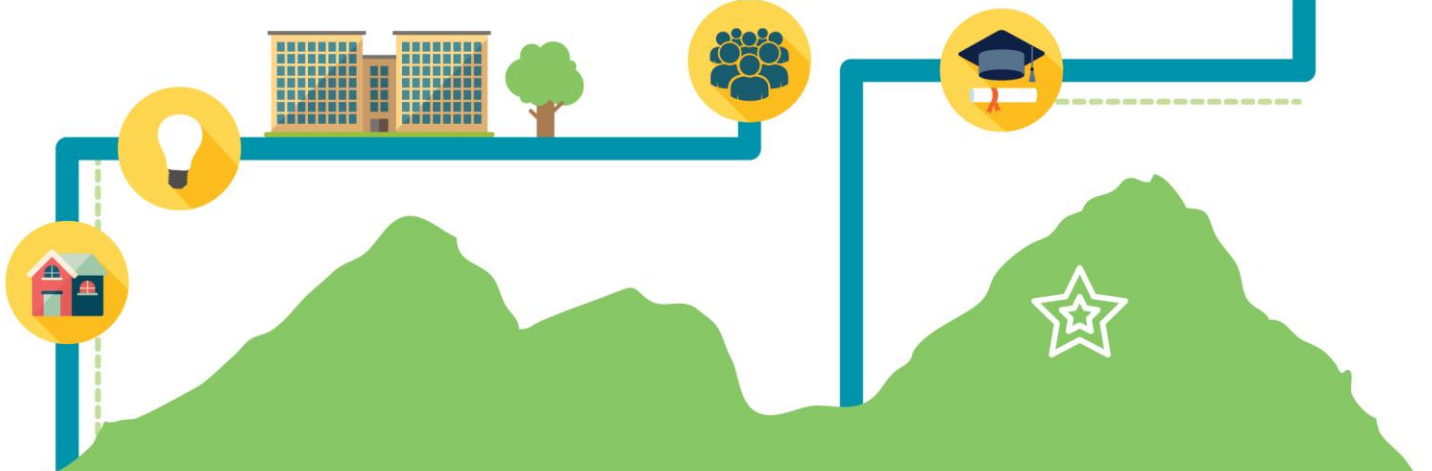




2024

# ROANOKE VALLEY COMMUNITY HEALTHY LIVING INDEX

Youth Health Status  
and Perceptions of Access  
to Healthy Living Resources



ROANOKE COLLEGE®  
Center for Community Health Innovation



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## Executive Summary

The Roanoke Valley Community Healthy Living Index (RVCHLI) is conducted to provide local leaders with benchmark data on youth health status and family perceptions of resources that support healthy living across the City of Roanoke, Virginia's diverse neighborhoods. Since its citywide launch in 2017, the RVCHLI has empowered stakeholders across various sectors to make informed decisions regarding the development of projects, programs, and investment strategies aimed at advancing community health equity.

The 2024 RVCHLI assessment was conducted between September 2024 and March 2025. Encompassing all children enrolled in the Roanoke City Public Elementary School System, weight-related health status was measured objectively by physical educators as part of the annual FitnessGram test battery ( $n = 5,121$ ), representing 74% of enrolled elementary school students. Self-reported data on healthy behaviors and perceptions of access to health-supporting resources were collected by questionnaire ( $n = 528$ ), representing 8% of students. The 2024 survey return rate was lower than in previous years (down from 29% of enrolled students in 2021), limiting the ability to generalize survey findings beyond the neighborhoods served by participating school zones.

### Weight-Related Health Status

- In 2024, 42% of Roanoke City's elementary school-aged children classified as overweight or obese compared to 34% nationally.
- Despite higher rates of weight-related health risks than national estimates, the prevalence of overweight and obesity in Roanoke City youth has returned to pre-pandemic levels.
- Age-related changes in weight-related health risk from kindergarten through 5<sup>th</sup> grade were similar for boys and girls. The most substantial increase in obesity prevalence occurred between 3<sup>rd</sup> and 4<sup>th</sup> grades, indicating a critical timepoint for intervention.
- Geographic patterns of weight-related health risks remained consistent with 2019 and 2021 findings, demonstrating persistently high rates of childhood obesity in neighborhoods within Roanoke's northeast quadrant.

### Physical Activity Participation

- An estimated 59% of Roanoke City youth do not engage in sufficient physical activity to produce health benefits. Only 26% of students reported being physically active five or more times per week, while 78% reported being active at least twice in a typical weekend.
- Reports of active commuting among elementary school students increased from 14% in 2021 to 21% in 2024.



## Nutrition-Related Beliefs and Behaviors

- 70% of families indicated that food affects physical health “very much” or “somewhat”.
- 85% of families reported eating dinner together 4-7 times per week.
- 64% of families described cooking more than 7 meals at home each week; 73% reported eating 1-3 pre-prepared meals per week.

## Neighborhood-Level Resources Supporting Healthy Living

- 61% of families described their neighborhood’s social culture as supportive of physical activity.
- Most families agreed their neighborhood is safe for children to be physically active during the daytime (87%) and evening (67%).
- Primary barriers to physical activity at home included: a lack of pedestrian infrastructure, traffic safety concerns, limited family resources, insufficient parks/playgrounds, general safety and social concerns, and weather.
- While 34% of Roanoke City families report difficulty purchasing healthy foods in their neighborhood, 83% indicated that healthy food options were easily accessible via active commuting or public transit.

## Neighborhood Culture of Health

- 56% of families reported that their neighborhood has an active group working to improve health.
- 59% of families said neighbors had taken action in the past year to make the neighborhood healthier or safer.

## Recommendations for Action

- Families recommend that stakeholders aiming to promote physical activity should actively focus on improving **neighborhood infrastructure**, **enhancing safety**, and **creating social opportunities** that normalize physical activity as part of a thriving neighborhood.
- To support healthy eating, families suggest prioritizing the **availability and affordability of healthy foods** near neighborhood centers. Families recommend that schools **enhance nutrition programming** and explore ways to **involve parents** in meal planning and nutrition education at school.
- To cultivate a neighborhood culture of health, stakeholders should consider strategies to **strengthen neighborhood forums** to **empower resident leaders**, **promote collective action** through neighborhood events, **celebrate success** stories to inspire continued action, and **encourage collaboration** between residents, local business, health partners, and faith-based organizations.



## Acknowledgements

The RVCHLI is led by Dr. Liz Ackley, Director of the Center for Community Health Innovation at Roanoke College, and is made possible through an enduring partnership with the Roanoke City Public School System. The 2024 RVCHLI was conducted with the support of Dr. Ian Michalski and undergraduate research assistants, Chikodili Obiekwe, Alicea Farmer, Adrianna Cortez, and Samuel O'Neill Nolen.

For more information or for questions regarding this report, please contact the Center for Community Health Innovation at [healthinnovation@roanoke.edu](mailto:healthinnovation@roanoke.edu) or visit us at [www.roanoke.edu/healthinnovation](http://www.roanoke.edu/healthinnovation).

### Suggested citation:

Ackley, E. I. (2025). *The 2024 Roanoke Valley Community Healthy Living Index: Youth Health Status and Perceptions of Access to Healthy Living Resources*. Center for Community Health Innovation at Roanoke College.

## Background

The Roanoke Valley Community Healthy Living Index (RVCHLI) was established in 2011 to raise local awareness about the influence of neighborhood environments on children's health across the city of Roanoke. Adapted from a validated tool developed by the Centers for Disease Control and Prevention<sup>1</sup>, the RVCHLI integrates GIS technology, family-reported perceptions of access to healthy living resources, and measures of youth health outcomes. This approach enables stakeholders from various sectors to make informed decisions when designing projects and programs aimed at improving community health and promoting equitable access to resources across city neighborhoods.

Beyond providing benchmark data on youth health and access to health-supporting resources, the RVCHLI has played a pivotal role in guiding strategic initiatives. It has informed planning for Roanoke's [Invest Health Initiative](#), the [Northwest Roanoke Food Access Initiative](#), citywide [data capacity-building efforts](#), and broader [policy changes aimed at advancing health equity](#).

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<sup>1</sup> Soowon, K., et al. (2009). Development of the Community Healthy Living Index: A tool to foster healthy environments for the prevention of obesity and chronic disease. *Preventive Medicine*, 50(S), 80-85.

## Methods

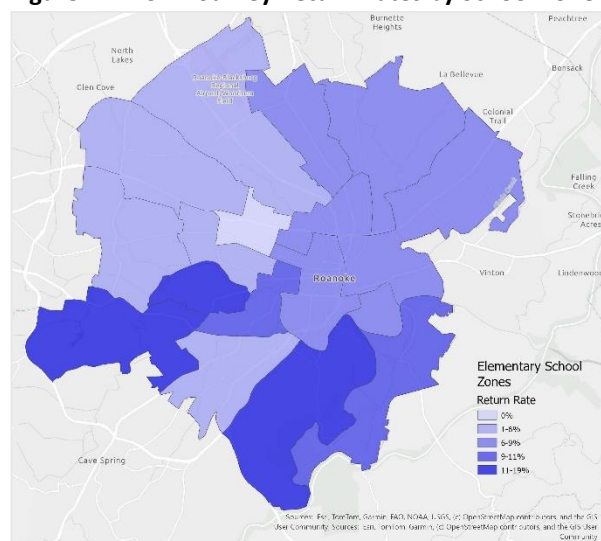
The Roanoke Valley Community Healthy Living Index (RVCHLI) is conducted through a collaborative partnership between the Center for Community Health Innovation (CCHI) at Roanoke College and Roanoke City Public Schools (RCPS). Since 2017, the RVCHLI has encompassed all students enrolled in Roanoke’s 17 public elementary schools, using validated methods to assess students’ weight-related health status (BMI-for-age)<sup>2</sup>, self-reported healthy behaviors, and perceptions of neighborhood-level resources that support healthy living.

The 2024 RVCHLI assessment was conducted from September 2024 through March 2025. Weight-related health status was measured by RCPS physical educators as part of the annual FitnessGram test battery ( $n = 5,121$ ; representing 74% of enrolled elementary school students). Self-reported engagement in healthy behaviors and perceptions of access to resources supporting healthy living were collected by questionnaire ( $n = 528$ , representing 8% of students). Questionnaires were prepared by CCHI staff in English and Spanish, distributed to families through RCPS, and returned to CCHI by consenting families. Data analysis and reporting was conducted by CCHI staff and undergraduate research fellows.

To better support neighborhood-level change and make healthy living more accessible for all Roanoke City families, the 2024 RVCHLI introduced a key modification to its survey design: the removal of the “neutral” option from Likert scale questions. This change was intended to encourage more actionable responses. Combined with survey distribution challenges in certain school zones, this adjustment may limit the ability to make direct comparisons with data from previous years.

Overall, survey participation in 2024 was the lowest since the RVCHLI expanded citywide in 2017, with only 8% of families responding (down from 29% in 2021). As a result, while the weight-related health data remain broadly representative of Roanoke’s elementary student population, the survey data only reflect neighborhoods served by participating schools (see Figure 1 and [Appendix 1](#)). Any individual or entity referencing 2024 survey findings should take care in their interpretations to ensure their conclusions are limited to the populations represented in the data.

**Figure 1. RVCHLI Survey Return Rates by School Zone**



<sup>2</sup> Youth health outcomes used in this assessment were determined objectively from the FitnessGram Test Battery. More information on this assessment can be found at <http://www.cooperinstitute.org/fitnessgram/components>.

# 2024 Roanoke Valley Community Healthy Living Index

## Weight-Related Health Status in Youth

Recent data reported by the National Center for Health Statistics indicate that one-third of elementary school-aged children nationwide are classified as overweight or obese, placing them at increased risk for weight-related health issues<sup>3</sup>. In comparison, 2024 evaluations of BMI-for-age revealed that 42% of Roanoke City’s elementary school-aged youth classify as overweight or obese, demonstrating higher rates of weight-related health risk in Roanoke compared to age-matched peers nationwide (see Table 1).

### Measuring BMI-for-Age

The measurement of body mass index-for-age (BMI-for-age) allows for the assessment of weight-related health risk in youth while controlling for maturation. Derived from assessments of weight and height, BMI-for-age percentiles can be used to classify a child as underweight (< 5<sup>th</sup> percentile for age), healthy weight (≥ 5<sup>th</sup> to < 85<sup>th</sup> percentile for age), overweight (≥ 85<sup>th</sup> to < 95<sup>th</sup> percentile for age), obese (≥ 95<sup>th</sup> percentile for age; class-I obesity), or severely obese (≥ 120% to < 140% of the 95<sup>th</sup> percentile for age; class-II obesity)<sup>2</sup>.

**Table 1. Weight-Related Health Status of Roanoke City Youth (2024)**

BMI-for age Classification	Boys	Girls	Total	United States <sup>3</sup>
Underweight	6%	5%	6%	12%
Healthy Weight	51%	53%	52%	54%
Overweight	17%	17%	17%	15%
Obese	26%	25%	25%	19%
<b>Total number of students (n)</b>	<b>2,553</b>	<b>2,568</b>	<b>5,121</b>	<b>n/a</b>

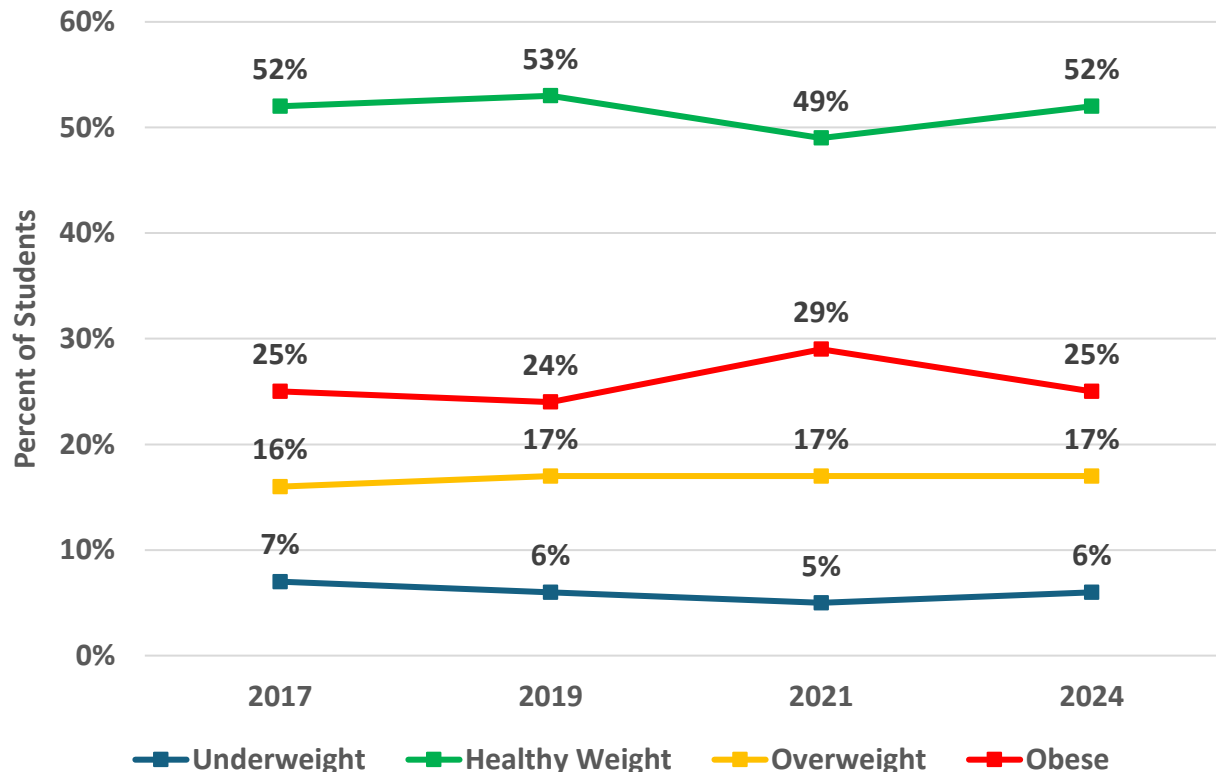
*Note: The local sample represents 74% of students enrolled in Roanoke City Public Elementary Schools. Comparative national data comes from the 2022-2023 National Survey of Children’s Health representing children ages 6-11 years<sup>3</sup>.*

Since 2017, citywide estimates of youth weight-related health status have been a core component of the RVCHLI, allowing for the observation of trends over time (see Figure 2). Although rates of overweight and obesity in the city of Roanoke remain higher than national averages, recent data show a positive shift. Following a 5% increase in childhood overweight and obesity during the post-pandemic period (see the [2021 RVCHLI Final Report](#)), the 2024 findings indicate a return to pre-pandemic levels of weight-related health risk among Roanoke City youth.

<sup>3</sup> Child and Adolescent Health Measurement Initiative. (n.d.). NSCH data query: 2022 National Survey of Children's Health. Data Resource Center for Child and Adolescent Health. Retrieved July 1, 2025, from <https://nschdata.org/browse/survey/results?q=10971&r=1&g=1151>



**Figure 2. Weight-Related Health Status in Roanoke City Elementary School-Aged Youth (2017-2024)**



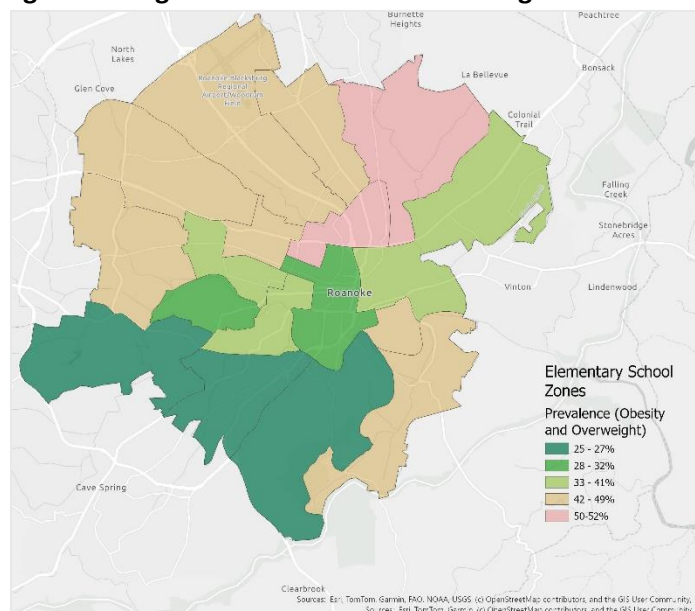
As in previous [RVCHLI assessments](#), neighborhood-level variations in weight-related health risk were evident in 2024 (see Figure 3). The highest prevalence of childhood overweight and obesity was observed in neighborhoods served by:

- Lincoln Terrace Elementary (58%)
- Monterey Elementary (52%)
- Morningside Elementary (49%)
- Garden City Elementary (48%)

In contrast, the lowest prevalence of weight-related health risk was reported in neighborhoods served by:

- Crystal Spring Elementary (26%)
- Grandin Court Elementary (28%)
- Fishburn Park Elementary (28%)

**Figure 3. Neighborhood Trends in Overweight and Obesity**

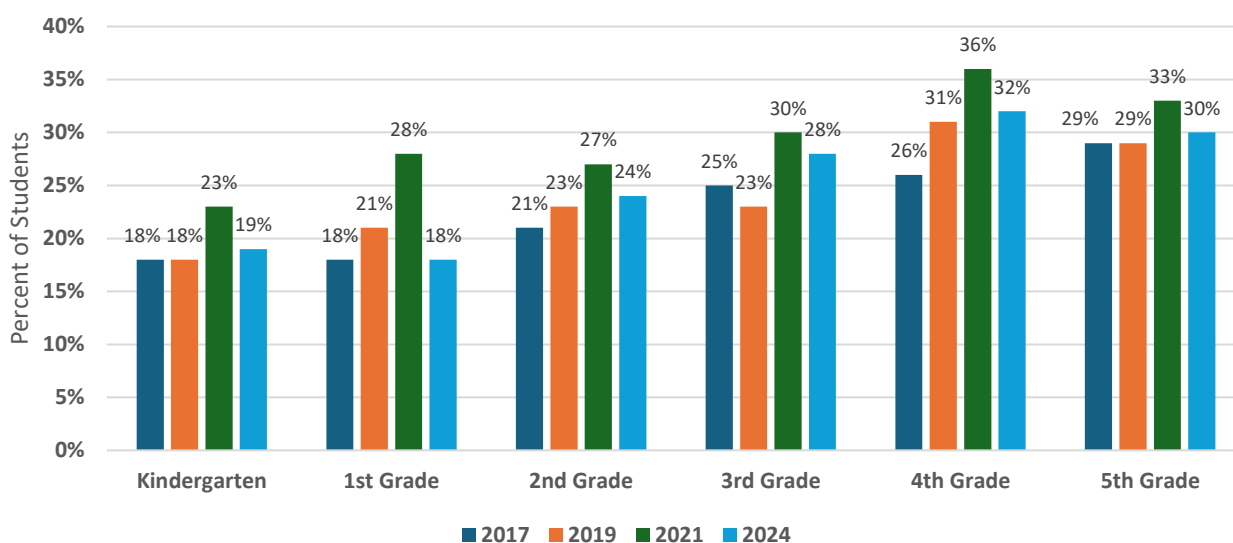




These place-based disparities are consistent with findings from 2019 and 2021, underscoring a persistent need for targeted interventions and investment strategies in neighborhoods, particularly within the northeast quadrant of the city.

When examining trends by age, national data show that obesity prevalence increases with age: from 13% among children aged 2–5 years, to 21% among those aged 6–11 years, and 22% among youth aged 12–19 years<sup>4</sup>. A similar pattern is observed among Roanoke City youth (Figure 4), with the most substantial increase in obesity occurring between 3rd and 4th grades, where the average prevalence rises by 5%.

**Figure 4. Trends in Obesity Prevalence by Grade (2017-2024)**



Trends in weight-related health status by sex were also examined, demonstrating that the prevalence of all weight classifications (Figures 5 and 6), as well as age-related changes in weight status from kindergarten through 5<sup>th</sup> grade (Figure 7), are generally similar between boys and girls.

When compared to a nationally-representative sample of youth aged 6-11 years<sup>4</sup>, where 22.9% of boys and 18.5% of girls classified as obese, Roanoke City youth display higher rates of obesity, with 26% of boys and 25% of girls classifying as obese.

<sup>4</sup> Stierman B, Afful J, Carroll M (2021). NHANES 2017-2020 Prepandemic Data Files... National Health Statistics Report.  
<https://stacks.cdc.gov/view/cdc/106273>

Figure 5. Weight-Related Trends in Boys (K-5<sup>th</sup> Grade)

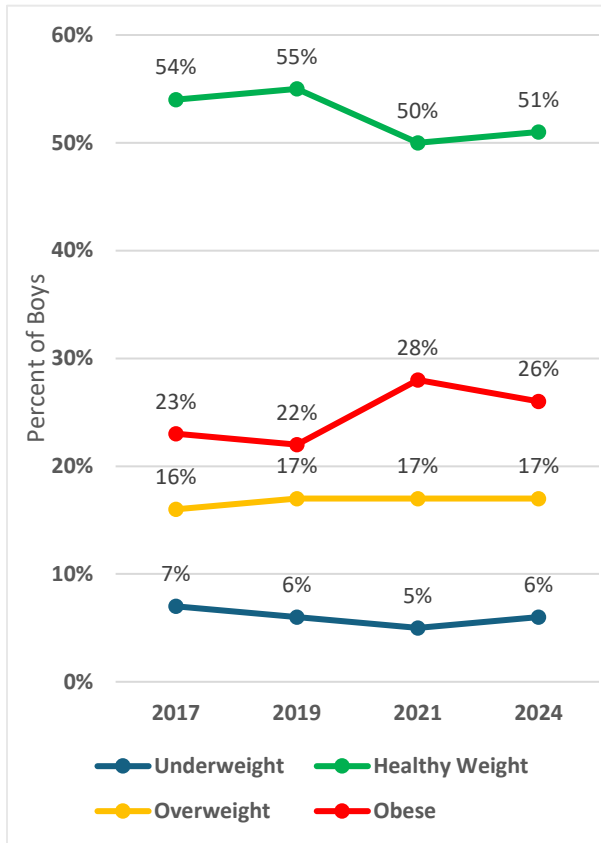


Figure 6. Weight-Related Trends in Girls (K-5<sup>th</sup> Grade)

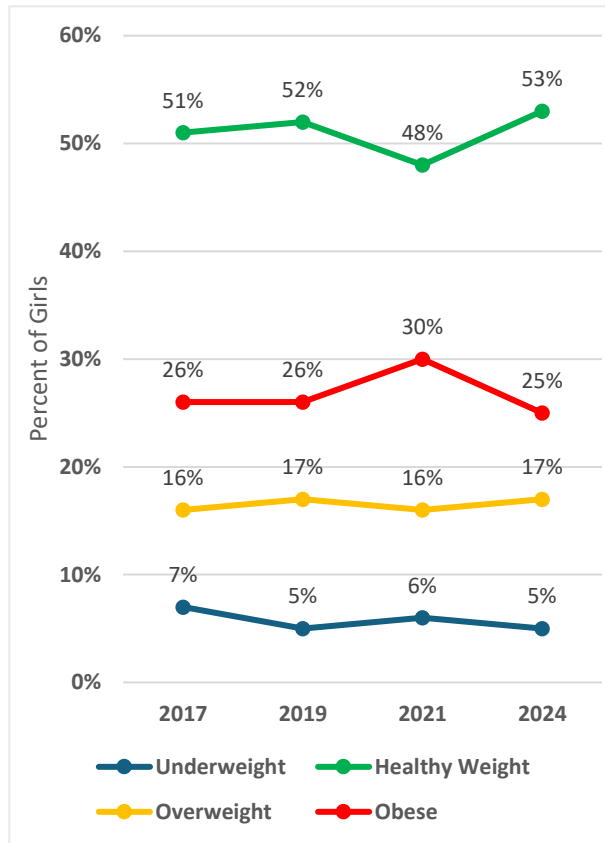
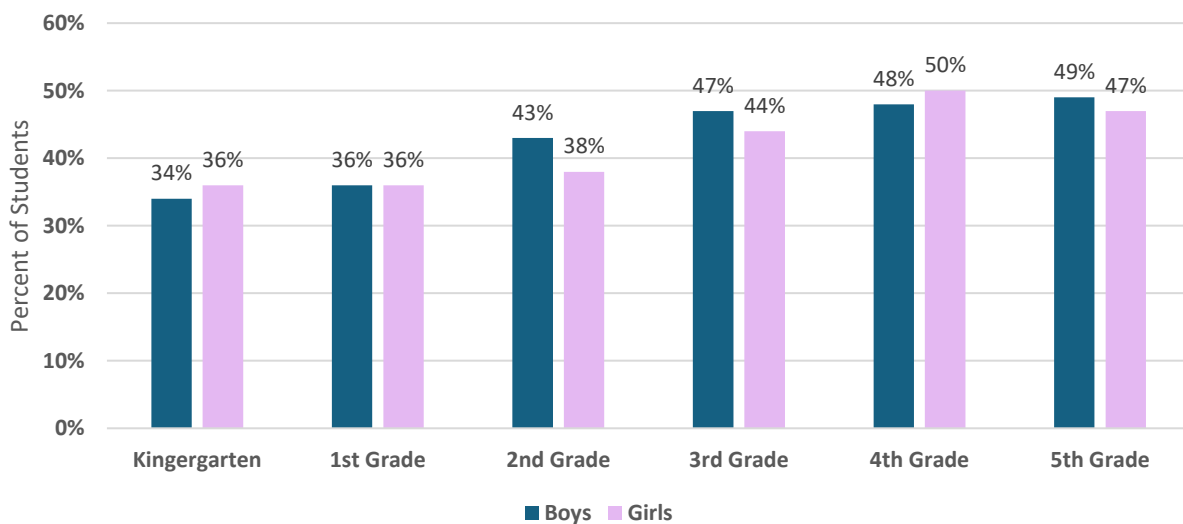


Figure 7. Grade-Level Prevalence of Overweight and Obesity among Boys and Girls (2024)



## Healthy Behaviors and the Factors that Influence Them

An individual's health is influenced by a variety of physical, environmental, and social factors, yet 20-50% of the variation in health status between individuals can be attributed to their behaviors<sup>5</sup>. Given that the ability to engage in healthy behaviors is influenced by the conditions in which people live, work, and play (e.g., access to nature, basic needs for health and safety, humane housing, meaningful employment, lifelong learning, reliable transportation, and a sense of belonging and civic engagement), families with children enrolled Roanoke City's elementary school system were invited to share information about their child(ren)'s physical activity and healthy eating behaviors, as well as their perceptions of access to health-supporting resources both at school and in their home neighborhoods. In 2024, 8% of eligible children (n = 528) and their families completed the RVCHLI survey, down from 29% of enrolled students in 2021. As a result, findings can only be generalized to neighborhoods served by participating school zones (see [Appendix 1](#)).

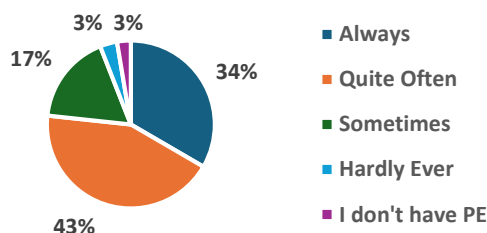


### Engagement in Physical Activity

As outlined in the Physical Activity Guidelines for Americans, elementary school-aged children should engage in at least 60-minutes of daily physical activity<sup>6</sup>. To assess adherence to this recommendation, students were asked to describe their engagement in physical activity across a typical week. According to RCPS policies, during school hours, elementary school children participate in 30-45 minutes of physical education once per week and receive 20-30 minutes of daily recess. Among student respondents, 77% reported being active “always” or “often” during physical education classes (an increase from 65% in 2021; Figure 8), and 92% reported playing hard “quite a bit” or “most of the time” during recess (up from 72% in 2021; Figure 9).

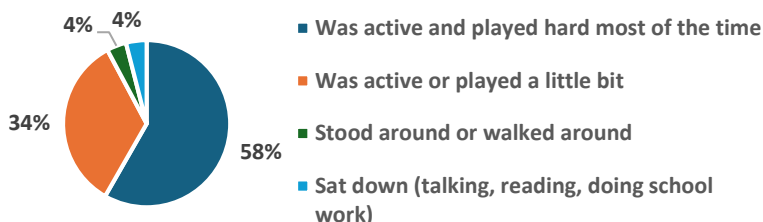
**Figure 8. Physical Activity during PE Classes**

*"In a typical week, how often were you active during PE classes?"*



**Figure 9. Physical Activity during Recess**

*"In a typical week, what did you do with most of your time during recess?"*



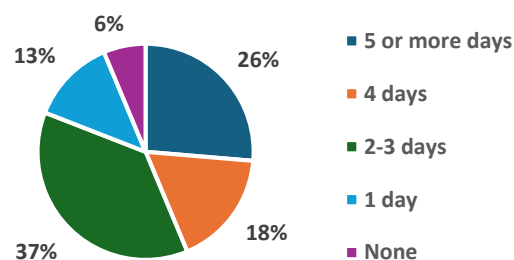
<sup>5</sup> Infographic developed by the Bipartisan Policy Center: <https://bipartisanpolicy.org/library/what-makes-us-healthy-vs-what-we-spend-on-being-healthy/>.

<sup>6</sup> Physical Activity Guidelines for Americans, 2<sup>nd</sup> Edition: [https://health.gov/sites/default/files/2019-09/Physical\\_Activity\\_Guidelines\\_2nd\\_edition.pdf](https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf)

To assess physical activity participation at home during a typical week, students were asked about the frequency of their physical activity, their active commuting patterns, and the types of activities they engage in most often. In relation to the national physical activity guidelines, only 26% of students reported being physically active five or more times during the week (see Figure 10). However, 78% of students reported being active at least twice in a typical weekend (Figure 11).

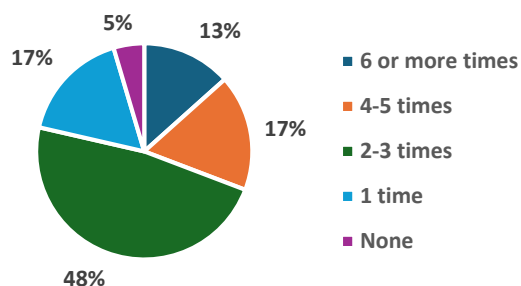
**Figure 10. Physical Activity After School**

*"On how many days after school did you do activities in which you were very active?"*



**Figure 11. Weekend Physical Activity**

*"In a typical weekend, how many times are you active?"*



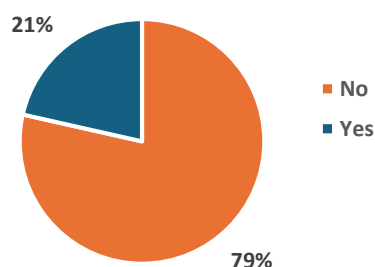
When asked to describe the physical activities they engage in most frequently, students most commonly reported walking (24%), biking or scootering (15%), playing sports (15%), or playing outside with friends (10%). A complete list of self-reported physical activities is included in [Appendix 2](#).

Regarding active commuting, 21% of students reported walking or biking to school – an increase from 14% in prior assessment years<sup>7</sup> (Figure 12). The highest rates of active commuting were reported by girls (58%) and students who were physically active on five or more days during the week (31%).

Taken together, it is estimated that at least 59% of children surveyed fall short of the recommended 60-minutes of daily physical activity known to produce health benefits<sup>8</sup>.

**Figure 12. Active Commuting to School**

*"Do you walk or ride your bike to school?"*



<sup>7</sup> Likely reflecting [RCPS transportation policy changes](#) for the 2024-2025 school year which increased the walking distance to bus stops (up to one mile total) and enforced revised walking zones to school.

<sup>8</sup> Accounting for weekday recess and PE class, four or more days of weekday physical activity, and two or more bouts of weekend physical activity.

## Engagement in Healthy Eating Behaviors

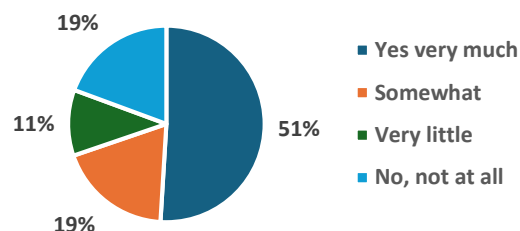
To better understand healthy eating behaviors among Roanoke City youth, students and their families were asked to describe their family food culture, nutrition beliefs, mealtime habits, and food preparation practices.

In 2024, 70% of families reported believing that the foods they eat affect their physical health “very much” or “somewhat” (Figure 13), declining from 78% in 2021 and 81% in 2017.

Despite this shift in perception, mealtime behaviors have remained consistent since 2017. In 2024, 85% of families reported eating dinner together 4-7 times per week (Figure 14). Additionally, 64% of families prepared more than seven meals at home each week (Figure 15), and 73% reported consuming 1-3 pre-prepared meals per week (Figure 16).

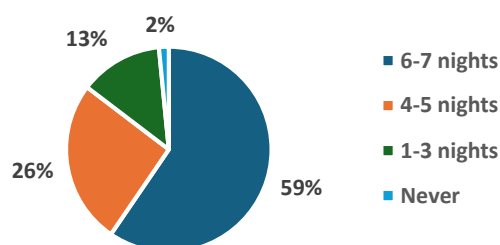
**Figure 13. Impact of Food on Physical Health**

"Do you think the foods you eat affect your physical health?"



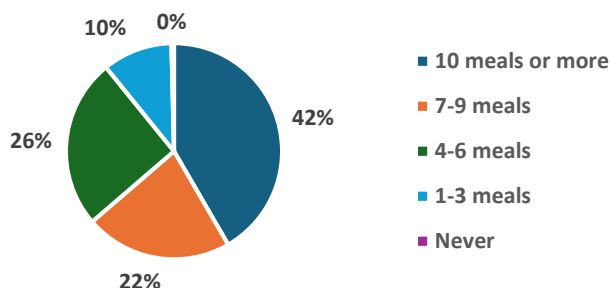
**Figure 14. Family Meals Together**

"How often during the week do you eat dinner together as a family?"



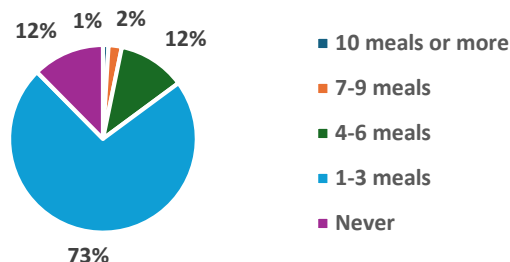
**Figure 15. Family Consumption of Self-Prepared Meals**

"How often during the week do you and your family make your own meals at home?"



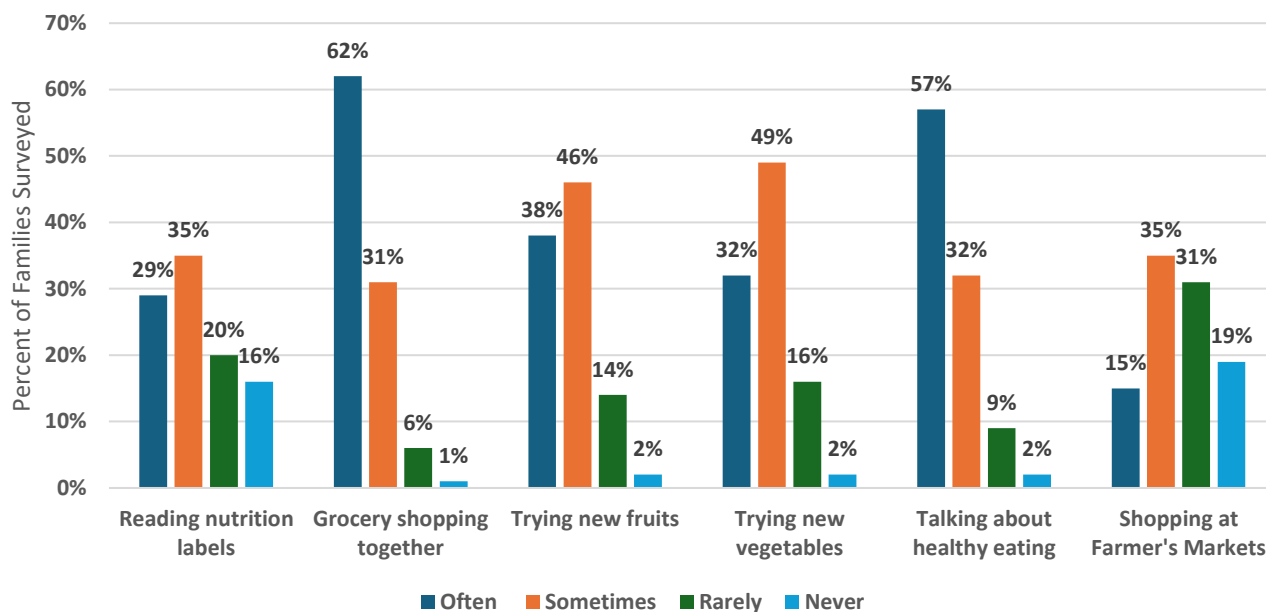
**Figure 16. Family Consumption of Pre-Prepared Meals**

"How often during the week do you and your family eat already prepared foods (fast food, restaurants, pre-packaged foods)?"



To better understand healthy eating habits and behaviors, students and their families were asked to describe their engagement in a variety of nutrition-related activities, ranging from reading nutrition labels to talking about healthy eating (see Figure 17). In 2024, the most commonly reported nutrition behaviors captured by the survey included grocery shopping together, talking about healthy eating, and trying new produce. Family reported engagement in these activities has remained consistent since 2017.

Figure 17. Engagement in Nutrition-Related Activities



## Healthy Environments

### Resources Supporting Physical Activity

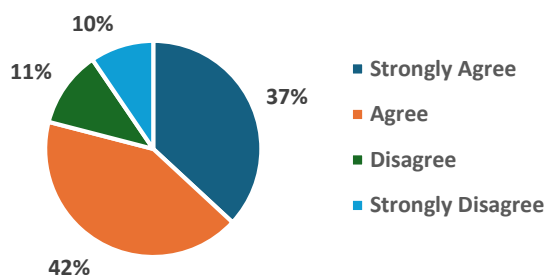
To better understand how neighborhood-level factors influence youth engagement in physical activity at home, children and their families were asked to describe their level of access to supportive resources. Among respondents, 79% of families indicated that parks and other areas were available in their neighborhood to support engagement in physical activity (Figure 18).

Perceptions of safety also played a key role. A strong majority – 87% of families – felt their neighborhood was safe for physical activity during the daytime<sup>9</sup> (Figure 19), while 67% felt it was safe for evening activities (Figure 20).

Additionally, 61% of families described their neighborhood as having a culture that supports physical activity (Figure 21), reflecting a marked increase in social support compared to 2021 (43%) and 2019 (47%).

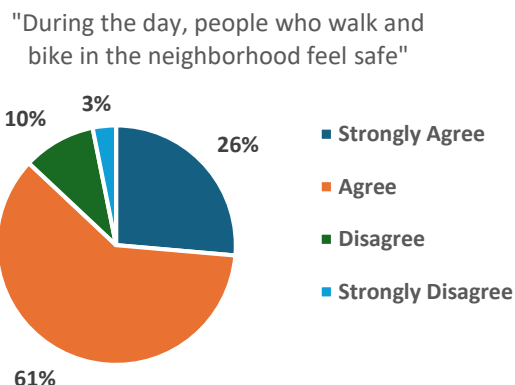
Figure 18. Neighborhood Resources Supporting Physical Activity

"Parks and other areas are available for people of all ages to be active in the neighborhood"

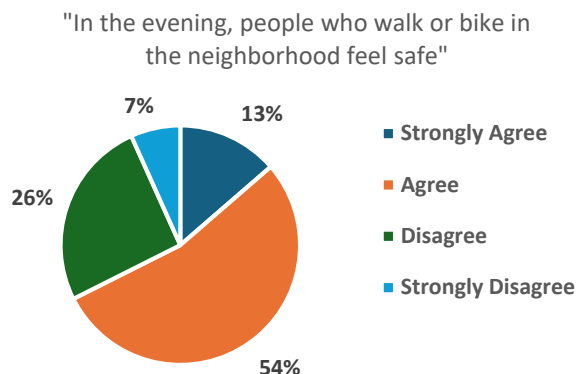


<sup>9</sup> As indicated by a "strongly agree" or "agree" response to survey prompts.

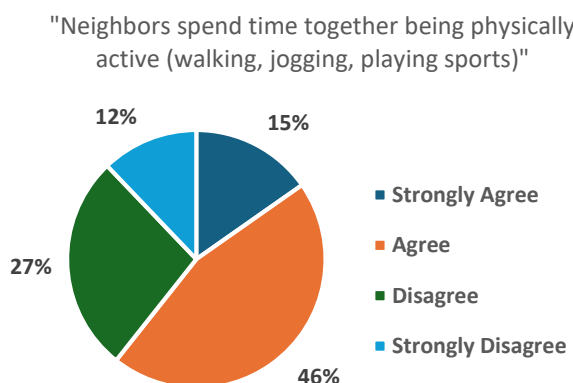
**Figure 19. Safety for Daytime Physical Activities**



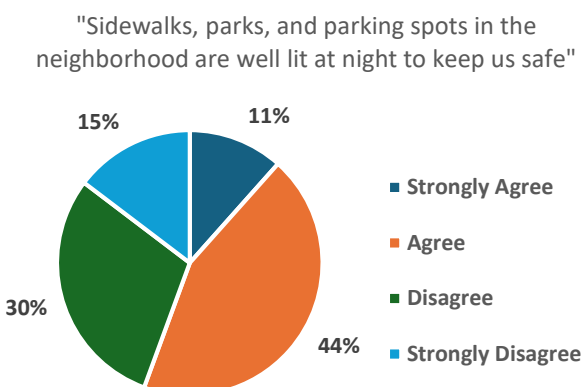
**Figure 20. Safety for Evening Physical Activities**



**Figure 21. Neighborhood Culture of Physical Activity**

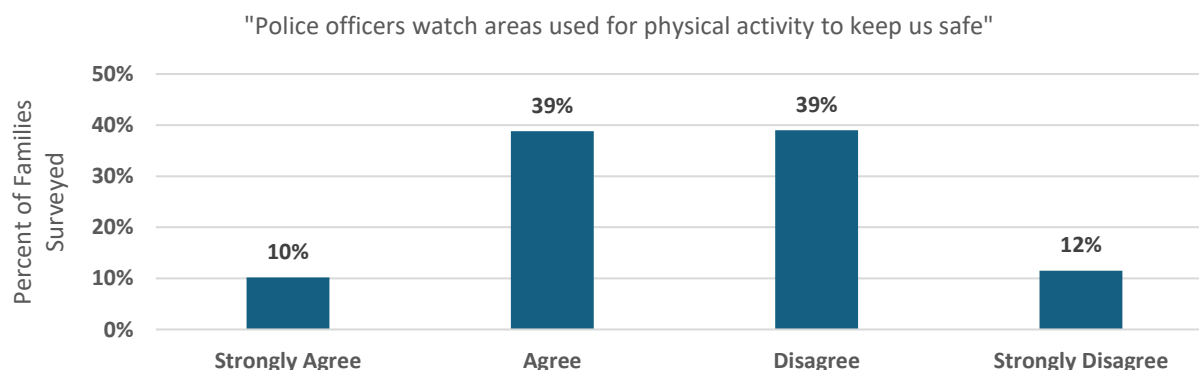


**Figure 22. Lighting Near Physical Activity Resources**



In terms of supportive infrastructure, only half of respondent families believed that areas designated for physical activity were well lit at night (Figure 22) or monitored by police (Figure 23). These findings suggest that while social support for physical activity is growing, improvements in physical infrastructure and safety monitoring remain important areas for development.

**Figure 23. Perceived Police Presence Near Physical Activity Resources**



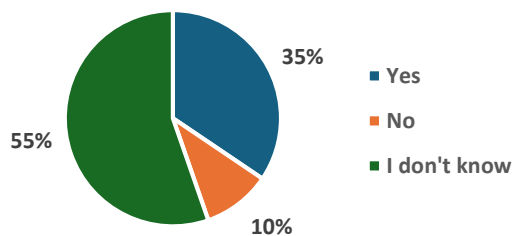


Despite enhanced [resource availability](#) supporting active commuting to school citywide, and a marked increase in the prevalence of self-reported walking or biking to school (Figure 12), only 35% of students and their families reported the availability of a *Safe Routes to School* program or *Walking School Bus* in their school zone (Figure 24), representing a 46% decline since 2021.

In addition, despite ongoing, high-impact traffic campaigns aimed at increasing driver awareness of safe speeds and pedestrian rights-of-way throughout the city of Roanoke<sup>10</sup>, more than half of families perceived speeding cars as a major safety concern for neighborhood pedestrians. This perception is consistent with findings from 2017, 2019, and 2021, highlighting a continued need for city-level policy and infrastructure investments to improve neighborhood safety.

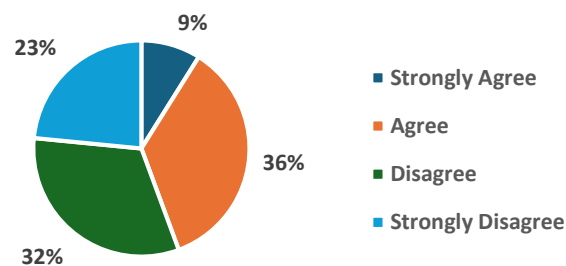
**Figure 24. Presence of Active Commuting Policy**

*"There is a 'Safe Routes to School' or 'Walking School Bus' program at my school"*



**Figure 25. Perceptions of Traffic Safety**

*"In the neighborhood, car drivers obey speed limits and stop for people crossing the street"*



When prompted to describe neighborhood-level barriers to physical activity through open ended questions (Figure 26), reported themes were consistent with barriers reported in 2017, namely:

- **Pedestrian infrastructure** (25% of responses), including lack of sidewalks (84%) or poor sidewalk conditions (16%);
- **Traffic safety** (25% of responses), including heavy traffic (52%), speeding cars (35%), lack of pedestrian safety (9%), and poor car visibility (4%);
- **Family resources** (18% of responses), including transportation (50%), guardian health issues (25%), resource affordability (5%), proximity to resources (5%), and time (5%);
- **Availability of parks/playgrounds** (12% of responses), including lack of availability (38%), poor proximity (38%), poor conditions (23%), and the presence of "others" (15%);
- **Safety concerns** (10% of responses), including the presence of "others" (42%), perceived crime (29%), gun violence (14%), and loose dogs (14%);
- **Social concerns** (7%), including neighborhood drama (43%) and the presence of "others" (57%);

<sup>10</sup> Including the 2021 "[No Need to Speed](#)", 2022 "[Keep Students Safe](#)", and 2024 "[Keep Each Other Safe](#)" campaigns

**Figure 26. Family-Identified Barriers to Neighborhood-Level Physical Activity**



### ***Resources Supporting Healthy Eating***

To better understand the availability of food resources close to home, families were asked about their access to food retailers and the presence of neighborhood-level incentives for purchasing healthy foods.

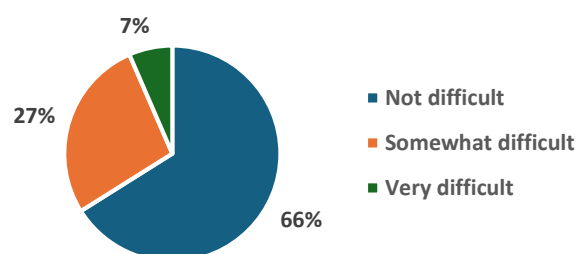
While 34% of Roanoke families reported some difficulty purchasing healthy foods in their neighborhood (up from 28% in 2021; Figure 27), 83% of families indicated they could access healthy food resources through active commuting or public transit (Figure 28), representing a marked increase from 2019 (71%) and 2021 (66%).

About half of respondent families agreed that incentives were available to make healthy food purchases more affordable (Figure 29). When asked about neighborhood gatherings, 57% of families reported that healthy foods were served (Figure 30) - up from 32% in 2021.

Finally, when identifying their primary grocery retailer, families most frequently named Kroger (34%), Walmart (31%), and Food Lion (14%; see Figure 31).

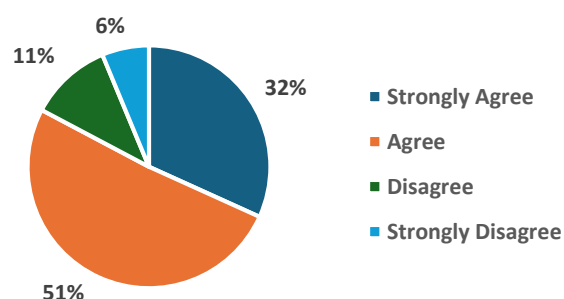
**Figure 27. Ease of Purchasing Healthy Food in Neighborhood**

"How difficult is it for you to purchase healthy foods in your neighborhood?"



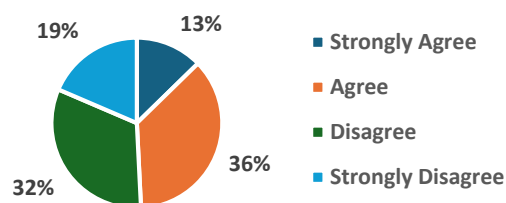
**Figure 28. Neighborhood-Level Access to Healthy Food**

"Food stores offering healthy foods are in walking distance from home or are easy to get to by bus"



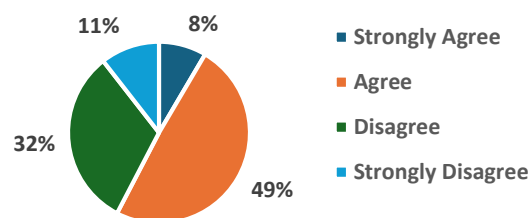
**Figure 29. Incentives for Purchasing Healthy Foods**

"Neighborhood food stores give us coupons or lower prices for healthy foods and drinks"

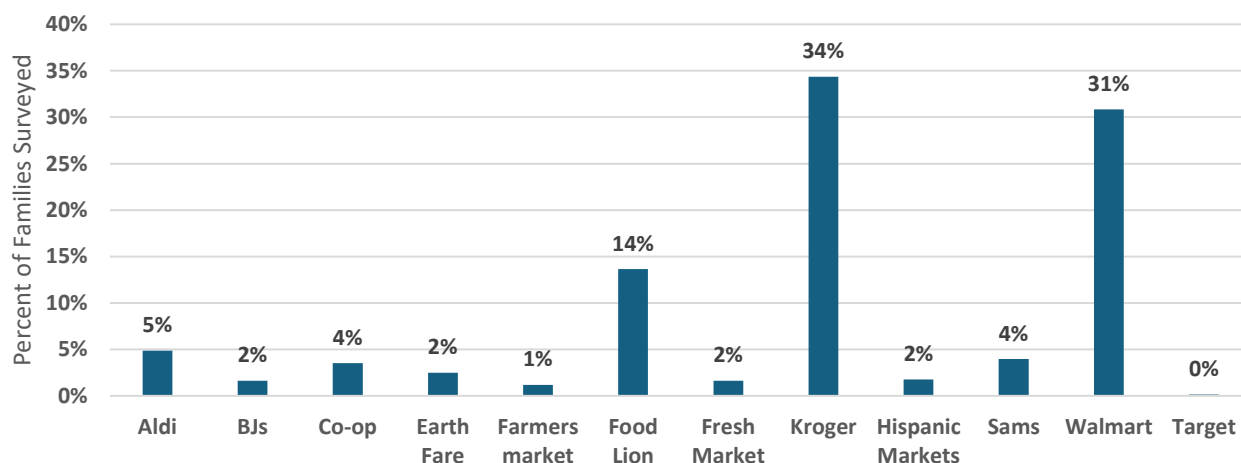


**Figure 30. Neighborhood Social Culture of Healthy Eating**

"When neighbors get together, healthy foods are served"



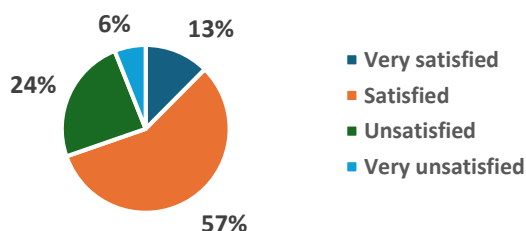
**Figure 31. Primary Grocery Retailers**



Because the school environment plays a key role in shaping healthy eating habits and beliefs, families were also asked to share their perceptions of school meals and nutrition programs. In general, families rated the nutritional value of school meals more positively than in previous years, with 70% of families being "satisfied" or "very satisfied" with the food served at school (Figure 32), up from 42% in 2021. Additionally, 87% of families felt that school nutrition programs were at least somewhat successful in improving their child's understanding of healthy eating (Figure 33) – an increase from 80% in 2021.

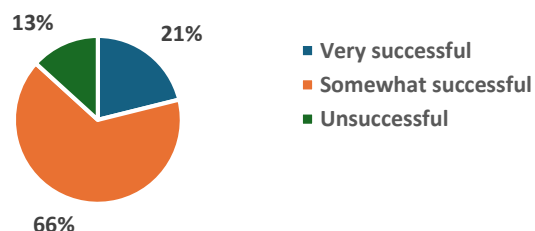
**Figure 32. Satisfaction with School Nutrition**

"How satisfied are you with the nutritional value of foods served at school?"



**Figure 33. Satisfaction with School Nutrition Programs**

"How successful do you think school programs have been at improving your knowledge of nutrition?"



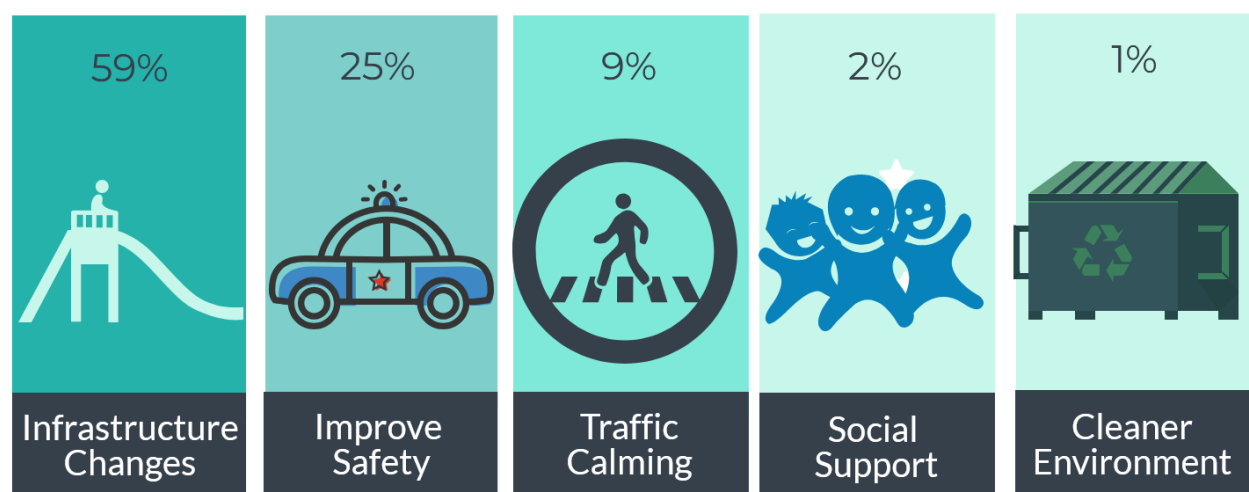
# Family Recommendations to Enhance Healthy Behaviors

## Physical Activity

Through open-ended questions, students and their families were invited to suggest ways to reduce neighborhood-level barriers to physical activity and make active living easier close to home (Figure 34). The most common recommendations included:

- **Improving neighborhood infrastructure** (59% of responses), including better access to parks (41%), more sidewalks (37%), more recreation facilities (7%), improved lighting (6%), better bike infrastructure (4%), and other supportive infrastructure (5%), such as greenway access, playgrounds, signage, and trails;
- **Enhancing neighborhood safety** (25% of responses), including general safety improvements (68%), pedestrian safety (17%), signage (7%), bike safety (2%), police patrolling (2%), violence prevention (2%), and drug/crime prevention (2%);
- **Implementing traffic calming mechanisms** (9% of responses), including speed limit enforcement (68%) and other support (32%);
- **Fostering a culture of health supporting physical activity** (2% of responses), including more social activities promoting physical activity (82%) and affordable opportunities to be active with others (18%);
- **Providing cleaner physical activity environments** (1%)

Figure 34. Recommendations to Enhance Physical Activity



### Recommendations for Action:

*Family-identified recommendations to support neighborhood physical activity have remained consistent since 2021. To promote active living among children and families, city leaders,*

residents, and community partners should prioritize efforts to: **improve neighborhood infrastructure, enhance safety for physical activity, and create inclusive social opportunities to make active living a visible and valued part of everyday neighborhood life.**

## Healthy Eating

When prompted to describe factors that would make healthy eating or healthy food purchases easier in their neighborhood (Figure 35), families described a desire for:

- **More affordable healthy food** (27% of responses);
- **More farmers markets** (20% of responses), including traditional farmers markets (92%) and mobile markets (8%);
- **Better access to healthy food close to home** (19% of responses);
- **More food retail options** (17% of responses), identifying grocery stores (56%), healthy restaurants (6%), and fresh produce (6%) as primary needs;
- **Better access to a variety of healthy food options** (13% of responses), including less fast food and more fresh produce.

Figure 35. Recommendations to Enhance Healthy Eating at Home

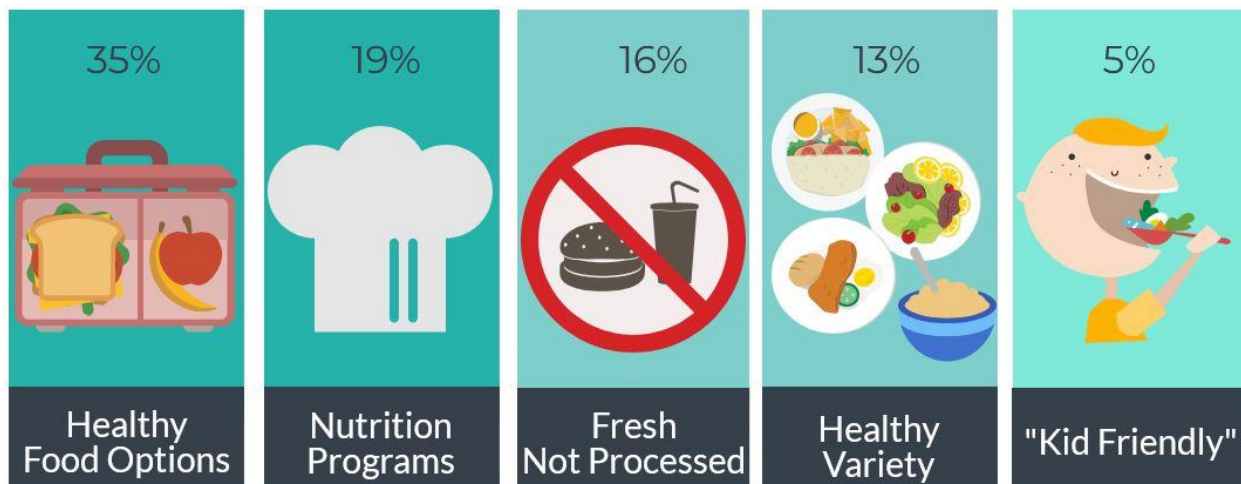


When asked to provide suggestions for improving school-based nutrition programs and activities (Figure 36), families recommended:

- **Increasing the availability of healthy food options** (35% of responses), including more fruits and vegetables (47%), reducing high sugar food and beverages (20%), providing healthier breakfast options (4%), and eliminating sugary drink options (4%, especially chocolate milk and soda);

- **Improving or establishing school nutrition programs** (19% of responses), including programs that enhance awareness of healthy eating habits (26%), establishing garden clubs or school gardens (21%), and cooking programs (10%);
- **Prioritizing fresh over processed foods** (16% of responses);
- **Enhancing the variety of food options available to students** (13% of responses), including more vegetarian options (11%), broader cultural representation of foods (7%), and more options for students with food allergies and sensitivities (7%);
- **Making foods more “kid friendly”** (5% of responses);
- **Improving messaging around healthy eating** (4% of responses), including sharing menus with parents (67%);
- **Enhancing parental involvement in school meals** (4% of responses);
- **Establishing a community produce program** (3% of responses), primarily related to bringing local produce into schools.

Figure 36. Recommendations to Enhance Healthy Eating at School



**Recommendations for Action:**

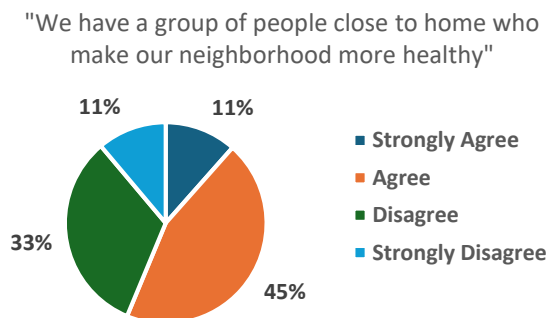
While primary recommendations for improving healthy eating in neighborhoods have remained largely unchanged since 2021, recent data show a shift in priorities. Affordability of healthy foods emerged as the top priority in 2024, up from the second-highest concern in 2021. Additionally, the proportion of families highlighting the need for healthy food options close to home rose from less than 4% in 2021 to 19% in 2024. To address these priorities, city leaders, residents, and community partners should consider prioritizing efforts to **launch healthy food loyalty programs, promote awareness of existing incentives, expand mobile markets and food hubs, and organize healthy food events at neighborhood gatherings.**

In terms of enhancing healthy eating in the school environment, primary themes remained consistent with those reported in 2021, but 2024 responses showed stronger agreement, with higher response rates within each theme. For example, enhancing the availability of healthy options increased from 23% in 2021 to 35% in 2024, and the desire for more nutrition education rose from 10% in 2021 to 19% in 2024. For the first time, families expressed a desire to be more involved in school nutrition efforts, including participating in meal program development and receiving better communication about school meals. To address these recommendations, school leaders, residents, and community partners should consider prioritizing efforts to **involve families in school meal planning and nutrition program design, improve the variety and cultural relevance of food in school meals, and enhance communication with families about meal offerings.**

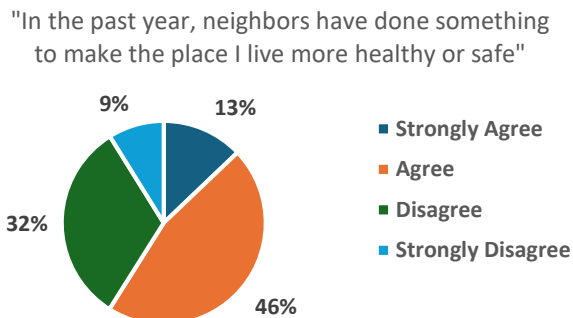
## Promoting a Culture of Health

In a 2020 analysis<sup>11</sup>, neighborhood social cohesion was identified as a key predictor of childhood obesity in Roanoke. To support the city's goal of fostering an inclusive culture of health<sup>12</sup>, families were asked to describe collective efficacy and social cohesion in their neighborhood. In 2024, 56% of families believed their neighborhood was supported by a group of people working to improve community health (Figure 37) - up from 32% in 2021. Additionally, 59% of families said their neighbors had done something in the past year to improve health or safety (Figure 38; an increase from 34% in 2021)<sup>13</sup>, and 75% of families believed their neighbors would offer support if someone nearby needed meal support (Figure 39).

**Figure 37. Neighborhood Group Supporting Healthy Living**



**Figure 38. Neighborhood Action to Enhance Healthy Living**



<sup>11</sup> Guthrie, H. & Ackley, E. I. (2020). A temporal analysis of collective efficacy and BMI-for-age in Roanoke City youth. Posters on the Hill, Washington, DC. Found at: [https://www.cur.org/wp-content/uploads/2023/09/2020\\_POHProgram\\_F.pdf](https://www.cur.org/wp-content/uploads/2023/09/2020_POHProgram_F.pdf)

<sup>12</sup> Roanoke City 2040 Comprehensive Plan: Priority 4, Policy 2. Found at: <https://planroanoke.org/city-plan-2040-pdf/>

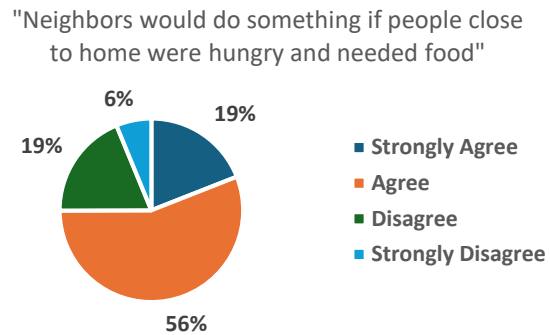
<sup>13</sup> Interpretations should be made cautiously given low school participation rates (see Appendix 1).



### **Recommendations for Action:**

Respondent families reported stronger perceptions of social cohesion and collective action compared to previous assessment years. To further cultivate a neighborhood culture of health in Roanoke, recommendations from national initiatives include promoting strategies which **strengthen neighborhood forums and resident leadership**, by offering training and microgrant opportunities to empower residents to lead health-focused initiatives close to home, **promote collective action** through organized neighborhood events focused on wellness, **celebrate neighborhood-led success stories** to inspire continued and expanded action, and **encourage collaboration** between schools, faith-based organizations, health providers, local business, and neighborhood groups to support a wholistic and inclusive culture of health.

**Figure 39. Neighborhood Support for Healthy Living**



## Appendix 1. Survey Response Rates by Elementary School

School	Enrollment (# of students)	Return Rate (% of enrolled students)
Crystal Spring Elementary	321	15%
Fairview Elementary	482	4%
Fallon Park Elementary	588	8%
Fishburn Park Elementary	286	5%
Garden City Elementary	310	11%
Grandin Court Elementary	347	17%
Highland Park Elementary	364	9%
Hurt Park Elementary	316	6%
Lincoln Terrace Elementary	288	8%
Monterey Elementary	502	7%
Morningside Elementary	276	9%
Preston Park Elementary	526	7%
Roanoke Academy for Math & Science Elementary	460	0%
Round Hill Elementary	717	4%
Virginia Heights Elementary	248	19%
Wasena Elementary	246	11%
Westside Elementary	626	5%
<b>Total = 6,903</b>		<b>Avg = 8%</b>

## Appendix 2. Self-Reported Modes of Physical Activity in Youth

Physical Activity Type	Reponses (#)	Responses (%)
Walking	286	24%
Biking or Scootering	178	15%
Playing Sports	178	15%
<i>Soccer (41%)</i>		
<i>Basketball (20%)</i>		
<i>Baseball / Softball (12%)</i>		
<i>Football (11%)</i>		
<i>Tennis (9%)</i>		
<i>Tee ball (2%)</i>		
<i>Disc golf (1%)</i>		
<i>Golf (1%)</i>		
<i>Volleyball (1%)</i>		
<i>Lacrosse (&lt;1%)</i>		
Playing Outside	120	10 %
Parks	109	9 %
Running	63	5 %
Hiking	49	4 %
Playgrounds	43	4 %
Swimming	39	3 %
Other	33	3 %
Skating	20	2 %
Fitness	17	1 %
Trampoline	16	1 %
Dancing	11	1 %
YMCA	11	1 %
Climbing	6	< 1 %
Library	6	< 1 %
Gardening	5	< 1 %
Fishing	4	< 1 %
Gymnastics	4	< 1 %
Jumping	4	< 1 %
Karate	3	< 1 %
Snow Play	3	<1 %
Games	3	< 1 %



**ROANOKE COLLEGE**

Center for Community Health Innovation