



Economic and Financial Analysis of Complete Streets in Billings, MT



July 2026

City of Billings Complete Streets Policy

- First passed in 2011; updated 2016
- No one facility type is required
- Policy is context sensitive – engineers consider many factors
- Most common way of accommodating all road users in recent arterial reconstruction projects has been providing a multi-use trail on one side of the road and sidewalk on the other
- Policy requires City of Billings Engineering Division to present collector and arterial construction and reconstruction projects to City Council at 30% design

“Complete Streets Infrastructure” According to the National Complete Streets Coalition, appropriate elements that make up a complete street would include sidewalks, bicycle lanes, shared – use paths, designated transit lanes, safe and accessible transit stops, safe crossings for pedestrians, including median islands, accessible pedestrian signals, and curb extensions. Additionally, they could include any features identified in the Billings Area Bikeway and Trail Master Plan, and the Manual on Uniform Traffic Control Devices.



Project Overview

After decades of implementing Complete Streets improvements, the City and the County seek to better understand how these investments have affected safety, accessibility, and economic development.

This report presents an **evidence-based analysis of the economic, financial, and social returns** generated by Complete Streets projects in Billings.

By combining **rigorous data analysis with local priorities and stakeholder perspectives**, the report offers insights to **inform future policy and investment decisions** that support safety, accessibility, and long-term economic vitality.

Complete Streets Impacts

Complete Streets can have a variety of community and economic impacts, including:

- | | | |
|--|---|--|
| Focus of today's presentation | { | <ul style="list-style-type: none">• Supporting new business formation and entrepreneurship• Increasing property values |
| Also analyzed in the report | | <ul style="list-style-type: none">• Increasing pedestrian activity and foot traffic• Catalyzing private investment and redevelopment along improved corridors• Enhancing safety for pedestrians, cyclists, and other road users |
| Not covered quantitatively in the analysis | { | <ul style="list-style-type: none">• Improving business accessibility and supporting retail sales• Expanding access to employment by reducing transportation barriers• Improving access to jobs, services, schools, and other community destinations• Reducing vehicle emissions and improving air quality• Encouraging walking and bicycling, leading to improved public health and lower healthcare costs |

Methodology Overview – Case Studies

This report uses a case study approach to assess the economic and social benefits of Complete Streets investments in Billings:

Case studies were selected based on the following criteria and guidelines:

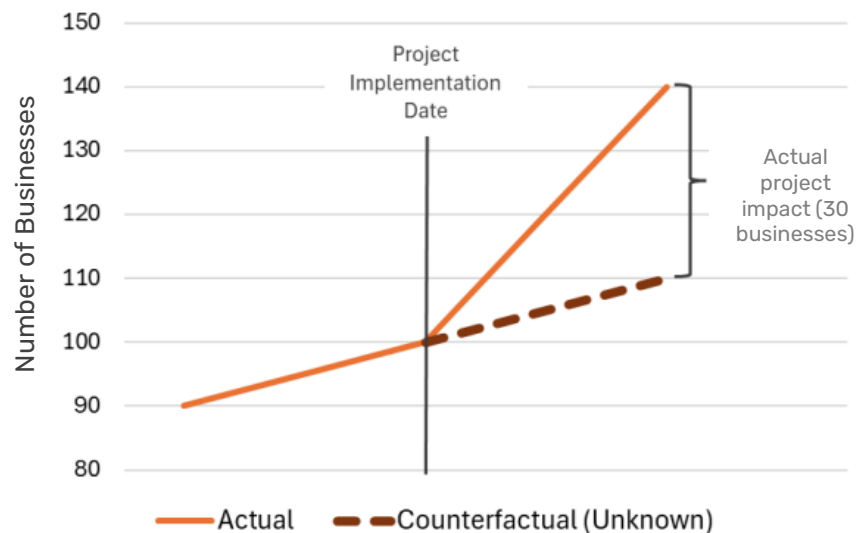
- Meaningful level of investment
- Mix of land uses
- Sufficient data availability
- Project completion clarity
- Geographic diversity

Methodology Overview – Analytic Techniques

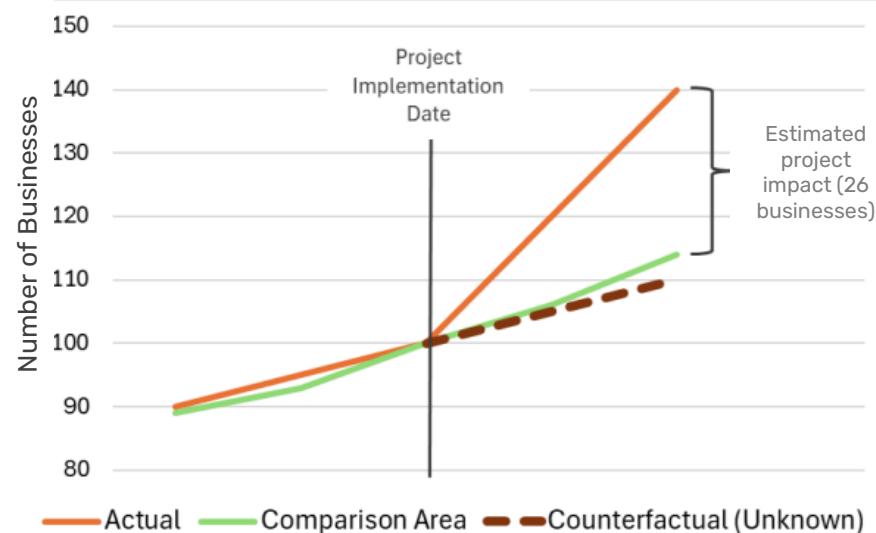
When sufficient data sources are available, economic indicators are evaluated using a difference-in-differences framework

EXAMPLE

Actual Project Economic Impact in the Study Area (Unknown)



Estimated Project Economic Impact in the Study Area



The Two Differences:

- 1. Before vs. After (Project Area)**
→ Measures change over time
- 2. Project Area vs. Comparison Areas**
→ Controls for external trends

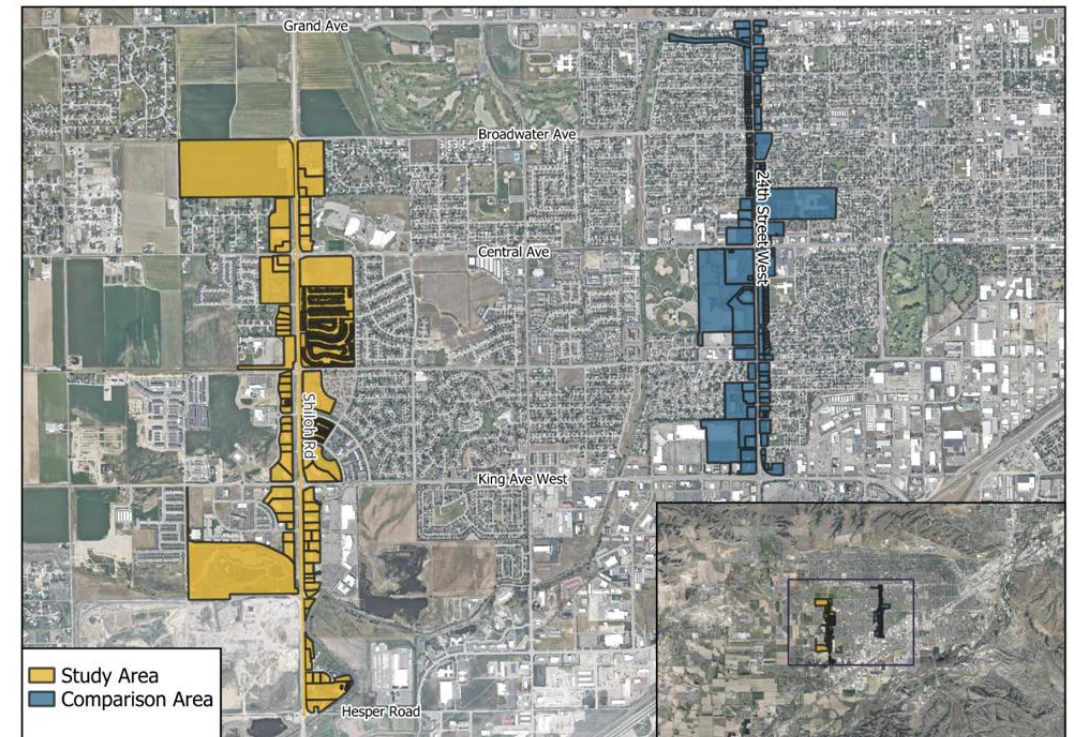
This approach helps control for external factors that affect all areas similarly, allowing the analysis to better isolate the portion of change that is plausibly attributable to the Complete Streets investment.

The Four Case Studies

North 30th Street striped bike lanes in Downtown Billings in 2011

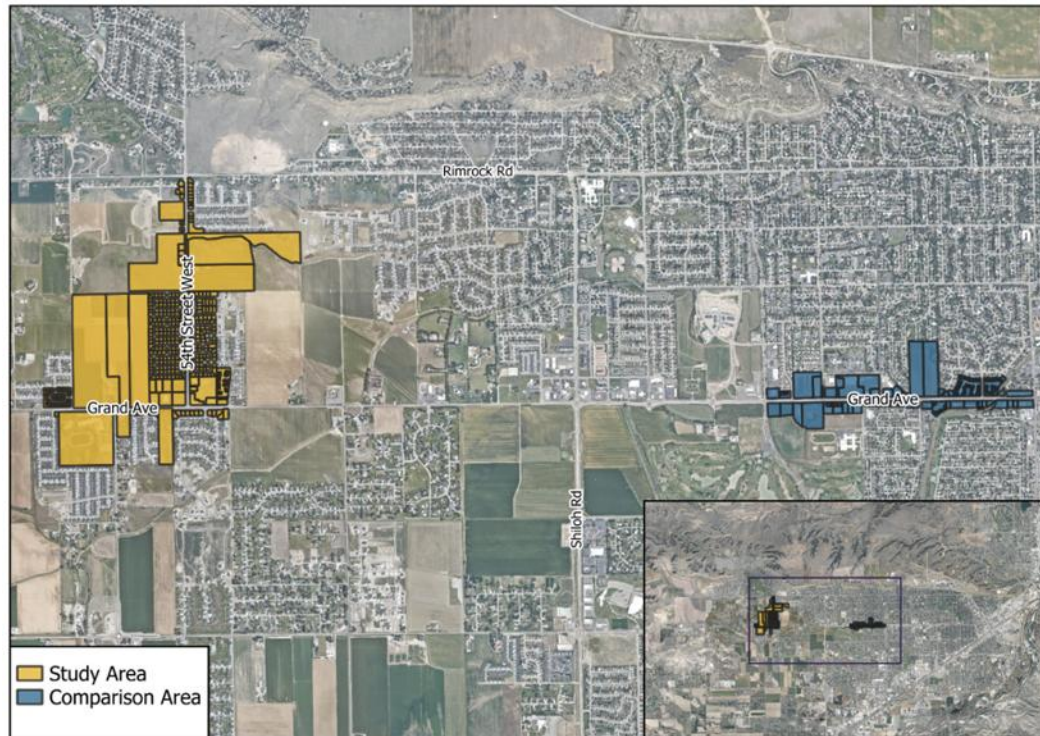


Shiloh Road shared-use path completed in 2010

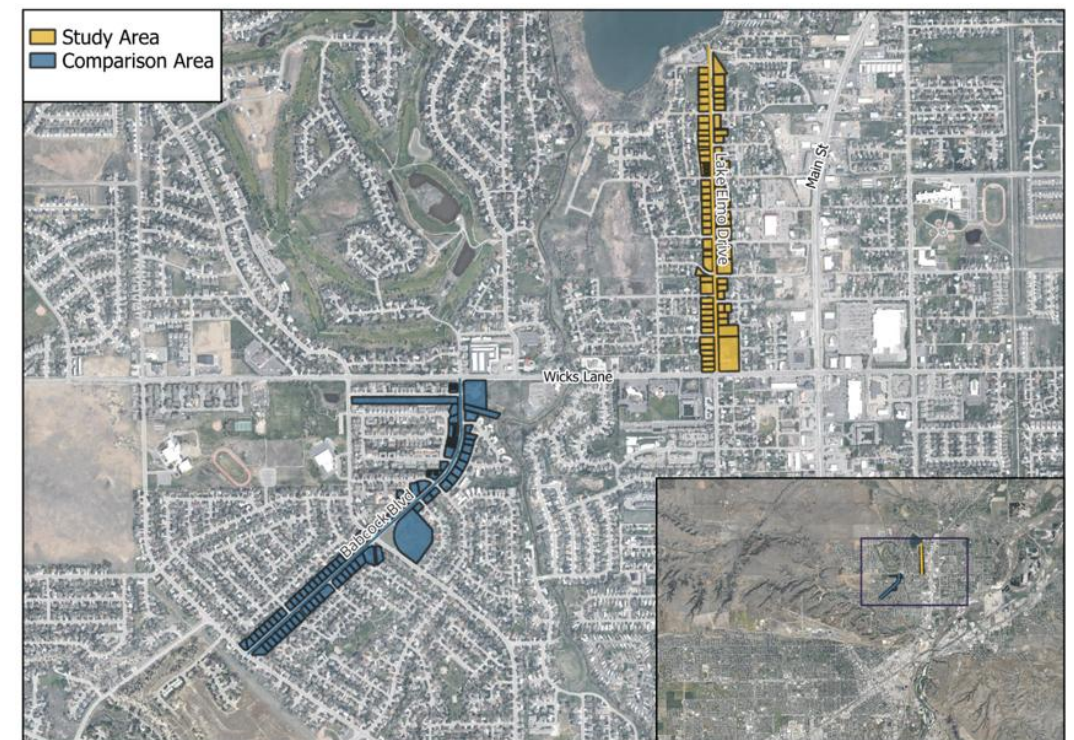


The Four Case Studies

Grand Avenue & 54th Street West, shared-use path completed in 2018



Lake Elmo Drive in the Heights striped bike lanes added in 2020



Construction Costs for Case Studies

Corridor	Total Project Construction Cost (\$2025)	Complete Streets Construction Costs (\$2025)	Complete Streets Construction Costs Per Lineal Foot (\$2025)
N. 30th St. from Grandview Blvd. to Montana Ave.	\$26,000	\$26,000	\$5
Shiloh Road from Broadwater to Hesper	\$14,885,000	\$1,871,100	\$344
Grand Ave. from 52nd St. W to Wilderness Dr and 54th to Rimrock	\$3,428,900	\$461,700	\$73
Lake Elmo Dr. from Wicks Ln. to Robertson Rd.	\$140,600	\$31,700	\$6

Note: All values are converted into 2025 dollars using the CPI.

North 30th Street and North 32nd Street Maintenance Costs

Table A.1.1 North 30th Street Complete Streets Maintenance Costs - Detailed Breakdown

Activity/Item	Estimated Annual Cost
Crosswalk Repainting	\$7,700
Street Repair for Bike Lane	\$2,500
Bike Lane	
- Sweeping	\$100
-Snow removal	\$200
-Bike lane restriping	\$1,800
-Bike lane symbol painting	\$200
Total	\$12,500

Table A.1.2 North 30th Street and Comparison Area Vehicular Elements Maintenance Costs

N. 30th St. from Grandview to Montana (~3,183 linear ft of bike lane and 6178 linear ft of roadway)	
Activity/Item	Estimated Annual Cost
Restriping	\$400
Sweeping	\$2,300
Snow Removal	\$3,700
Long-term Street Repair	\$11,600
Total	\$18,000
N. 32nd St. from Parkhill to Montana (Approximately 4,940 linear ft)	
Activity/Item	Estimated Annual Cost
Restriping	\$300
Sweeping	\$1,800
Snow Removal	\$3,000
Long-term Street Repair	\$11,700
Total	\$16,800

Shiloh Road and 24th Street West Maintenance Costs

Table A.1.3 Shiloh Road Complete Streets Maintenance Costs – Detailed Breakdown

Activity /Item	Estimated Annual Cost
Pedestrian Refuge Islands	\$300
Crosswalk Repainting	\$8,700
Slurry Seal	2,900
Multi-Use Trail (broken out by the items listed below)	
-Sweeping	\$1,400
-Snow removal	\$800
-Mowing/weeding	\$500
-Spraying for weeds	\$1,100
-Generic trail maintenance	\$600
Total for street	\$16,300

Table A.1.4 Shiloh Road and Comparison Area Vehicular Elements Maintenance Costs

Shiloh Rd. – Broadwater Ave. to Hesper Dr. (~13,076 lineal ft)	
Activity/Item	Estimated Annual Cost
Restriping	\$4,600
Sweeping	\$9,800
Snow Removal	\$16,000
Long-term Street Repair	\$37,800
Total	\$68,200
24 th St. W. – Central Ave. to King Ave. (~5,438 lineal ft)	
Activity/Item	Estimated Annual Cost
Restriping	\$1,200
Sweeping	\$5,000
Snow Removal	\$8,200
Long-term Street Repair	\$25,200
Total	\$39,600

Grand Avenue and 54th Street West Maintenance Costs

Table A.1.5 Grand Avenue & 54th Street West Complete Streets Maintenance Costs - Detailed Breakdown

Activity/Item	Estimated Annual Cost
RRFBs (Pedestrian Activated Flashing Light at Crossing)	\$800
Crosswalk Repainting	\$3,500
Slurry Seal	\$1,900
Multi-Use Trail (broken out by the items listed below)	
-Sweeping	\$1,400
-Snow removal	\$1,000
-Mowing/weeding	\$400
-Spraying for weeds	\$700
-Generic trail maintenance	\$600
Total	\$10,300

Table A.1.6 Grand Avenue & 54th Street West and Comparison Area Vehicular Elements Maintenance Costs

Grand Ave. from 52 nd to Wilderness and 54 th from Grand to Rimrock (~8,758 lineal ft)	
Activity/Item	Estimated Annual Cost
Restriping	\$2,000
Sweeping	\$4,800
Snow Removal	\$7,900
Long-term Street Repair	\$35,600
Total	\$50,300
Grand Ave. from 24 th St. W to 32 nd St. W (Approximately 6290 lineal ft)	
Activity/Item	Estimated Annual Cost
Restriping	\$1,400
Sweeping	\$3,500
Snow Removal	\$5,700
Long-term Street Repair	\$34,000
Total	\$44,600

Lake Elmo and Babcock Boulevard Maintenance Costs

Table A.1.7 Lake Elmo Drive Complete Streets Maintenance Costs - Detailed Breakdown

Activity/Item	Estimated Annual Cost
Crosswalk Repainting	\$500
Chip Seal for Bike Lanes	\$1,300
Bike Lane	
- Sweeping	\$200
-Snow removal	\$300
-Bike lane restriping	\$2,000
-Bike lane symbol painting	\$300
Total	\$4,700

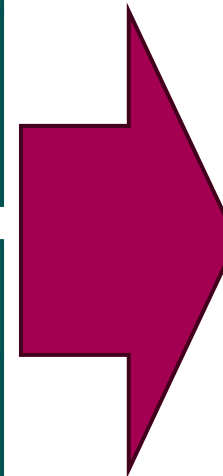
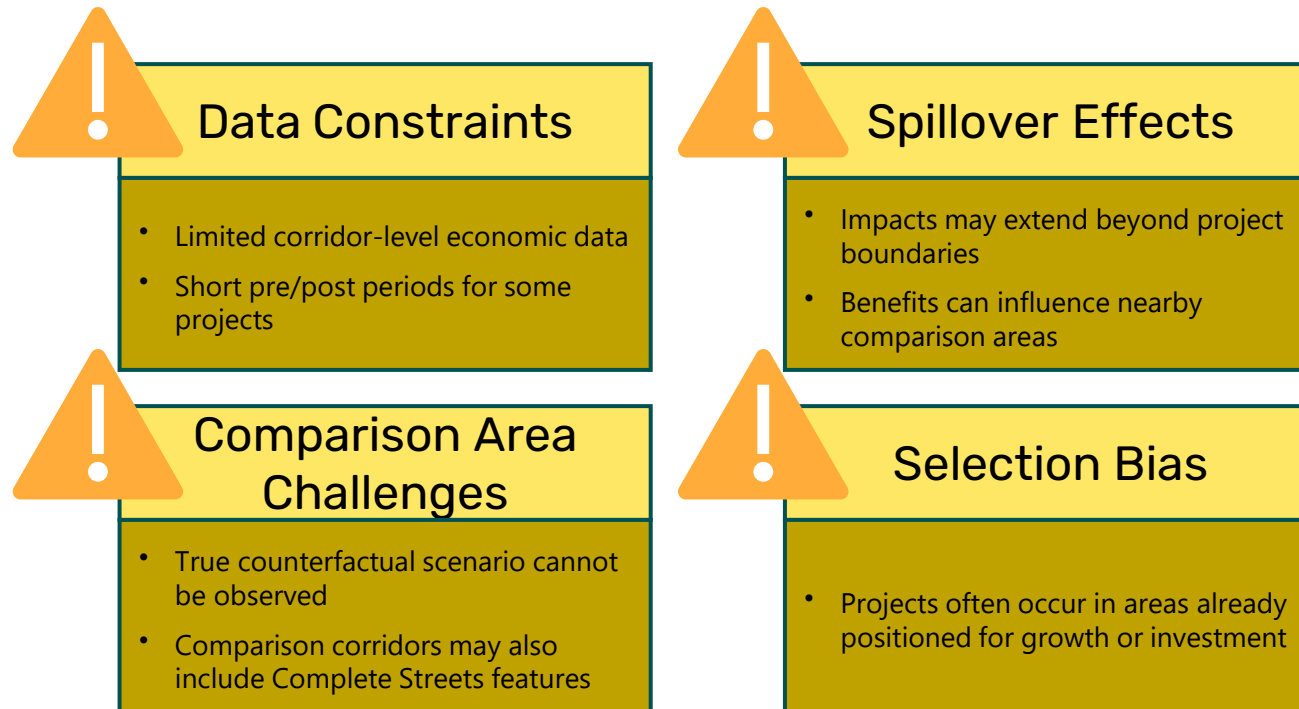
Note: Values may not exactly sum to totals due to rounding.

Table A.1.8 Lake Elmo Drive and Comparison Area Vehicular Elements Maintenance Costs

Lake Elmo Dr. from Wicks Ln. to Robertson Rd. (~ 4,382 linear ft)	
Activity/Item	Estimated Annual Cost
Restriping	\$200
Sweeping	\$1,600
Snow Removal	\$2,600
Chip Sealing	\$6,600
Total	\$11,000
Babcock Blvd. from Governors Blvd. to Wicks Ln. (~4,904 linear ft)	
Activity/Item	Estimated Annual Cost
Restriping	\$300
Sweeping	\$1,800
Snow Removal	\$2,900
Chip Sealing	\$9,600
Total	\$14,600

Interpretation of Results

Limitations & Challenges



Interpreting the Findings



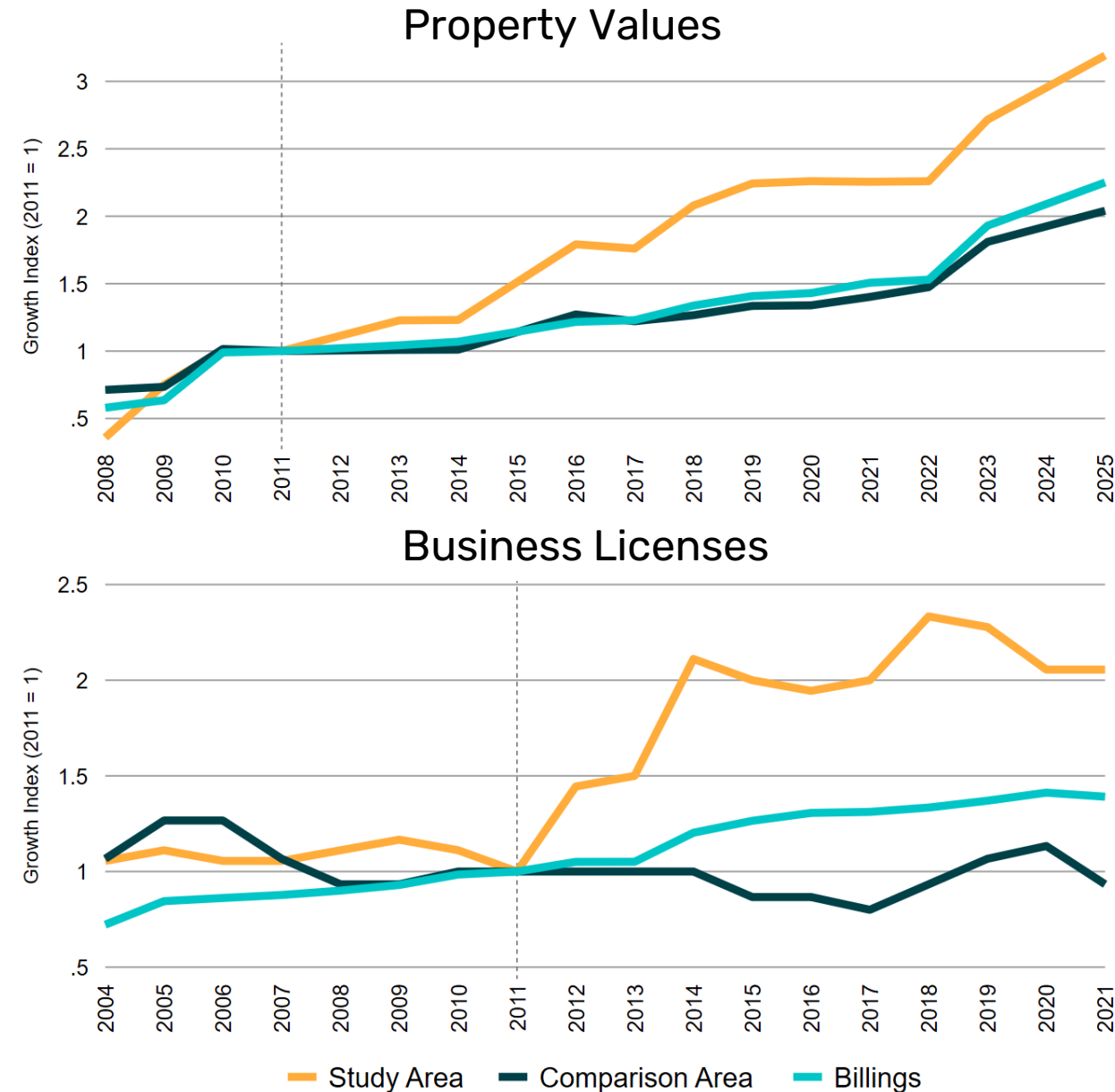
Consistency Across Case Studies

- Individual numerical estimates may be sensitive to data limitations**, external factors, and short-term variability
- Given these challenges, the results of a difference-in-differences analysis are **best interpreted collectively** rather than in isolation
- Repeated positive trends across locations provide strong evidence** that Complete Streets investments are associated with improved economic activity and corridor performance

Case Study Results – North 30th Street

Comparison Corridor: North 32nd Street

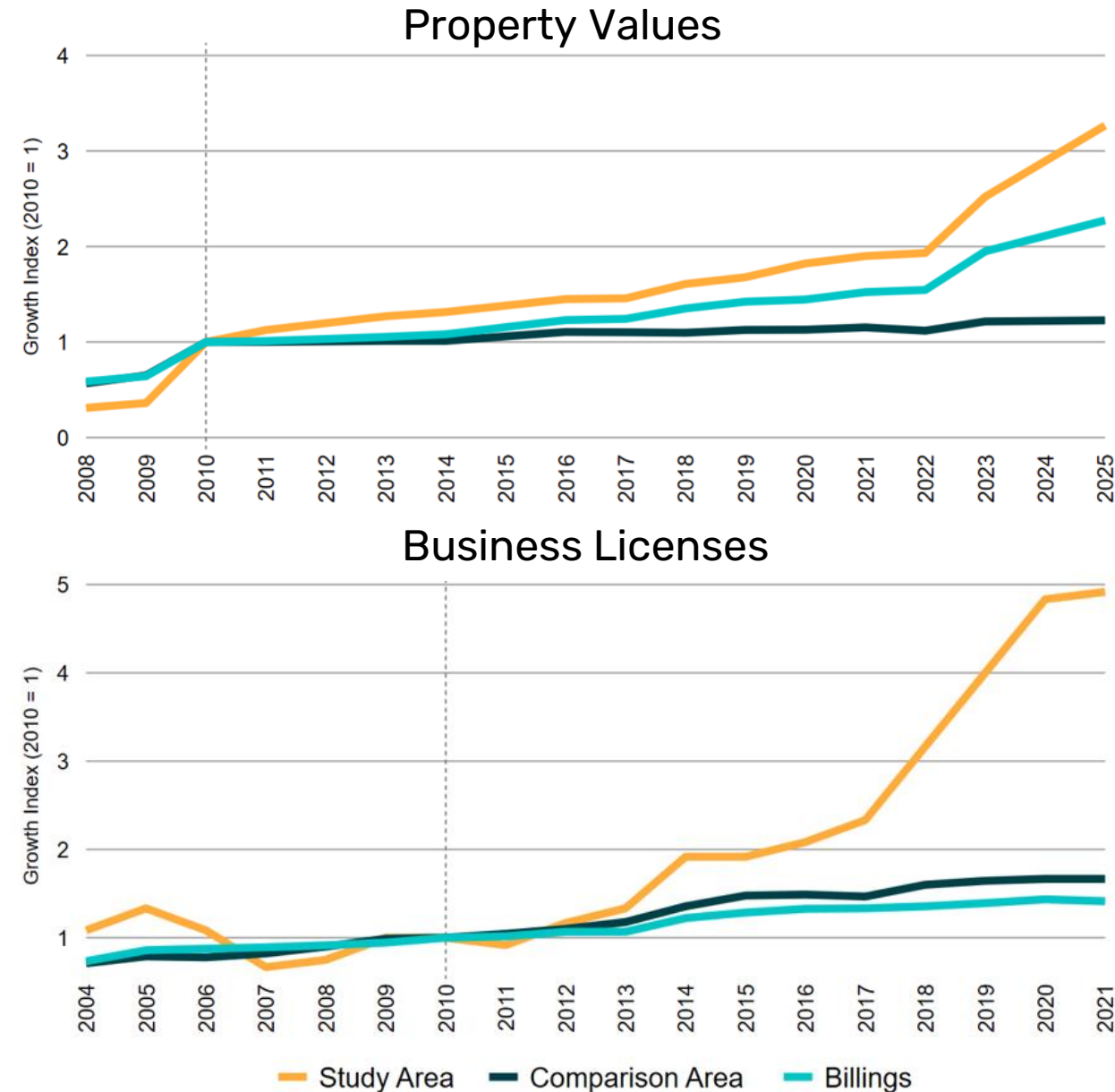
- **Property Values:** Property values more than tripled from 2011 to 2025, significantly outpacing both the comparison corridor and citywide growth, indicating strong increased demand.
- **Business Activity:** The number of business licenses more than doubled shortly after the improvements and remained elevated over time, demonstrating strong and sustained business growth.



Case Study Results – Shiloh Road

Comparison Corridor: 24th St W, from Grand Ave to King Ave W

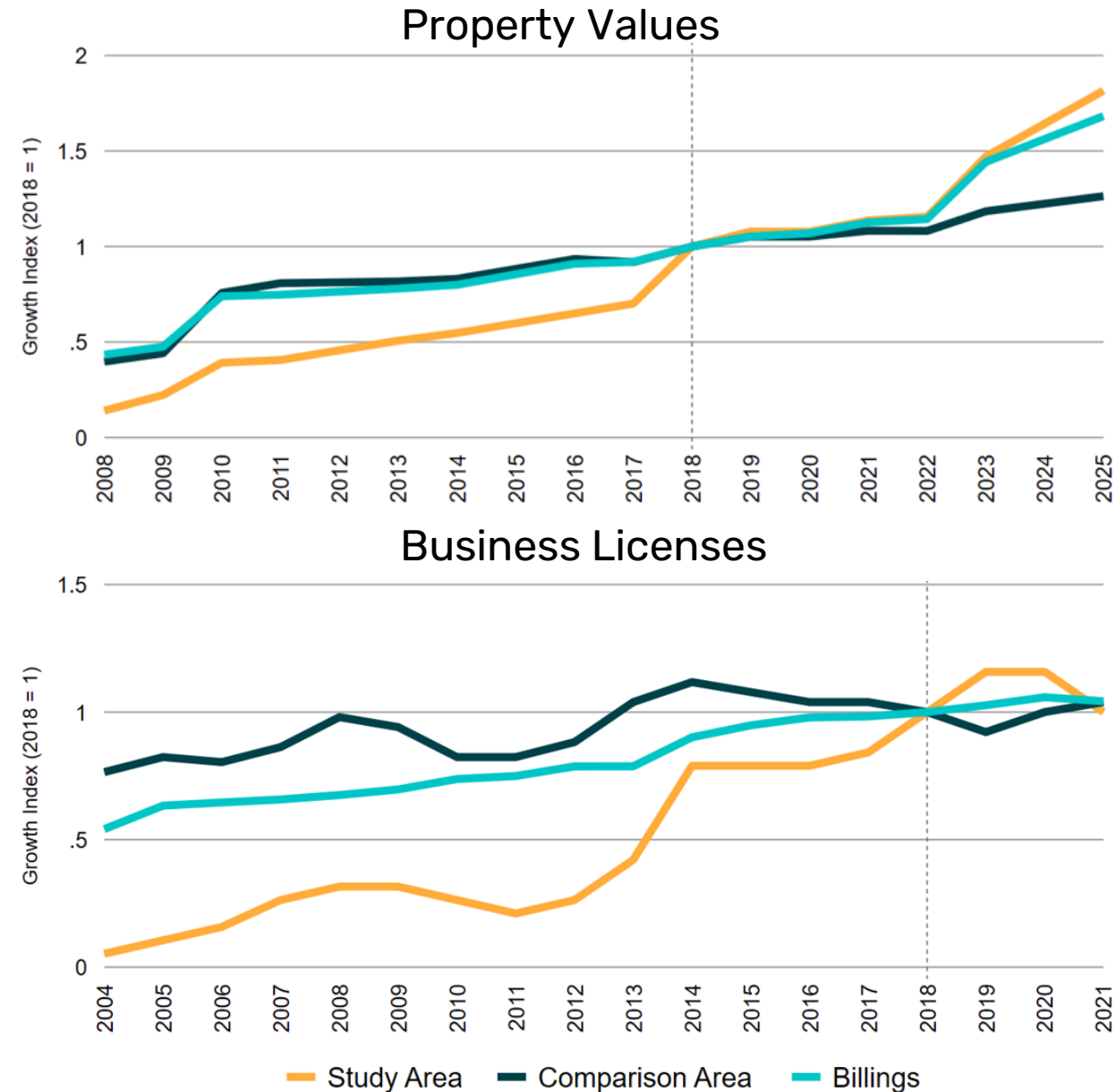
- **Property Values:** Property values along Shiloh Road consistently outpaced both the comparison corridor and citywide growth, nearly doubling from 2010 to 2022 and continuing to grow faster than the city thereafter, indicating strong and sustained corridor demand.
- **Business Activity:** The number of business licenses grew nearly fivefold after the project, far exceeding growth in both the comparison area and city overall, demonstrating significant expansion in commercial activity.



Case Study Results – Grand Ave & 54th St W

Comparison Corridor: Grand Ave from 32nd Street W to 24th Street W

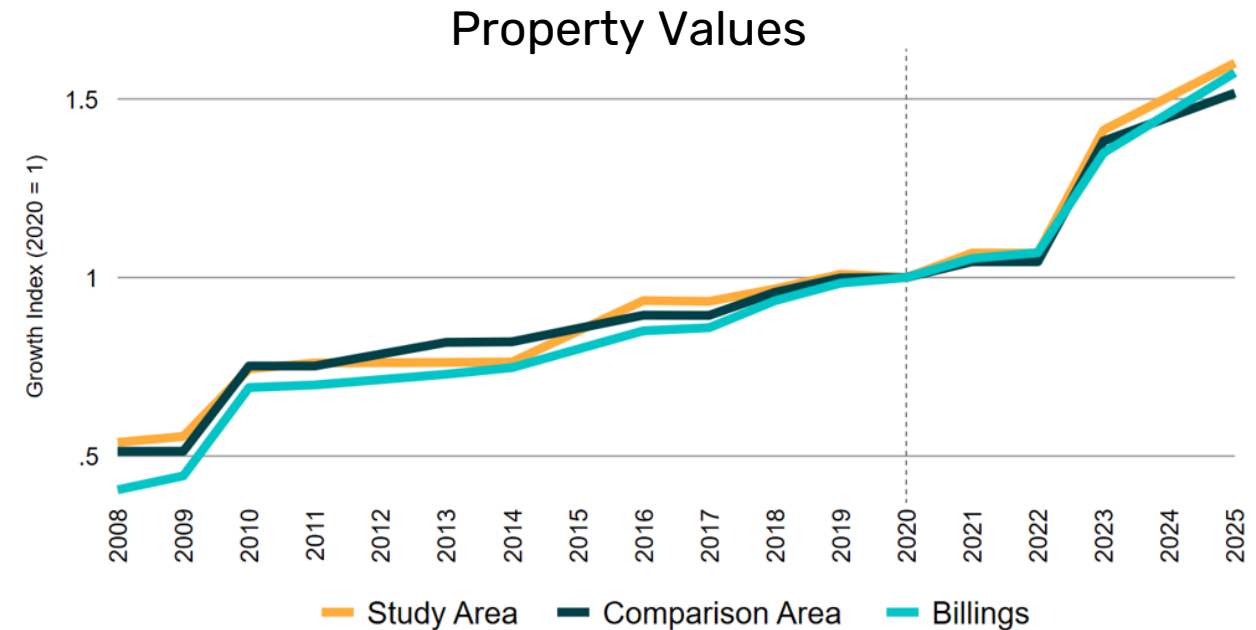
- **Property Values:** The study area outperformed the comparison area and city, growing by 160 percent between 2017 and 2025 and suggesting that the roadway and Complete Streets improvements led to meaningful impacts on property values.
- **Business Activity:** The corridor experienced growth in businesses while the city overall and comparison area remained flat, though these impacts were confounded by Covid-19.



Case Study Results – Lake Elmo Drive

Comparison Corridor: Babcock Boulevard

- **Property Values:** While the study area slightly outperformed the comparison area by 2025, the evidence is not strong enough to point to impacts related to the Complete Street investment.



Note: Businesses activity was not assessed for this case study because Lake Elmo Drive is predominately residential.

Summary of Results

Reminder about result interpretation: *Although impacts cannot be quantified precisely for individual corridors, the analysis provides credible evidence of impacts and associations across multiple case studies and indicators.*

- In almost all cases, the **data generally point to positive impacts.**
- Three of the four case studies, and all with commercial properties, demonstrated substantial **positive impacts of Complete Streets investments on property values.**
- There is also **strong evidence supporting the hypothesis that increased accessibility leads to greater business activity.**

Case Study Area	Property Values	Business Licenses
North 30th Street	Strong Positive Evidence	Strong Positive Evidence
Shiloh Road	Strong Positive Evidence	Strong Positive Evidence
Grand Ave & 54th Street West	Strong Positive Evidence	Some Positive Evidence
Lake Elmo Drive	Limited/No Difference	N/A

Comparing Costs and Tax Revenue Impacts

- This study includes a **high-level analysis** of the total **additional costs associated with Complete Streets** (construction and annual maintenance) **compared against the aggregate tax benefits** from property value impacts (calculated using difference-in-differences).
- Property tax gains exceed project costs in almost all cases**, generating millions in net revenue over time.
- At Lake Elmo Drive, the small negative result reflects the residential nature of the corridor (relatively smaller impacts and lower tax rate) as well as fewer years post-construction to recoup costs.

	North 30th Street (2011)	Shiloh Road (2010)	Grand Avenue & 54th Street West (2018)	Lake Elmo Drive (2020)
Number of Years with Complete Streets	14	15	7	5
Total Costs (Construction and Annual Maintenance)	\$90,696	\$2,000,181	\$508,459	\$51,626
Total Complete Streets Property Value Impact Since Construction	\$981,926,070	\$2,150,246,655	\$537,760,058	\$2,735,697
Tax Rate	1.20%	1.20%	1.20%	0.88%
Property Tax Impact (Total Since Construction)	\$11,783,113	\$25,802,960	\$5,925,180	\$24,074
Property Value Benefit Less Costs (Total Since Construction)	\$11,692,416	\$23,802,779	\$5,416,722	-\$27,552

Overall, results provide evidence that property tax benefits of Complete Streets outweigh the associated costs, even without considering benefits to business performance and other safety and community impacts.

Clarification of How to Interpret Tax Results

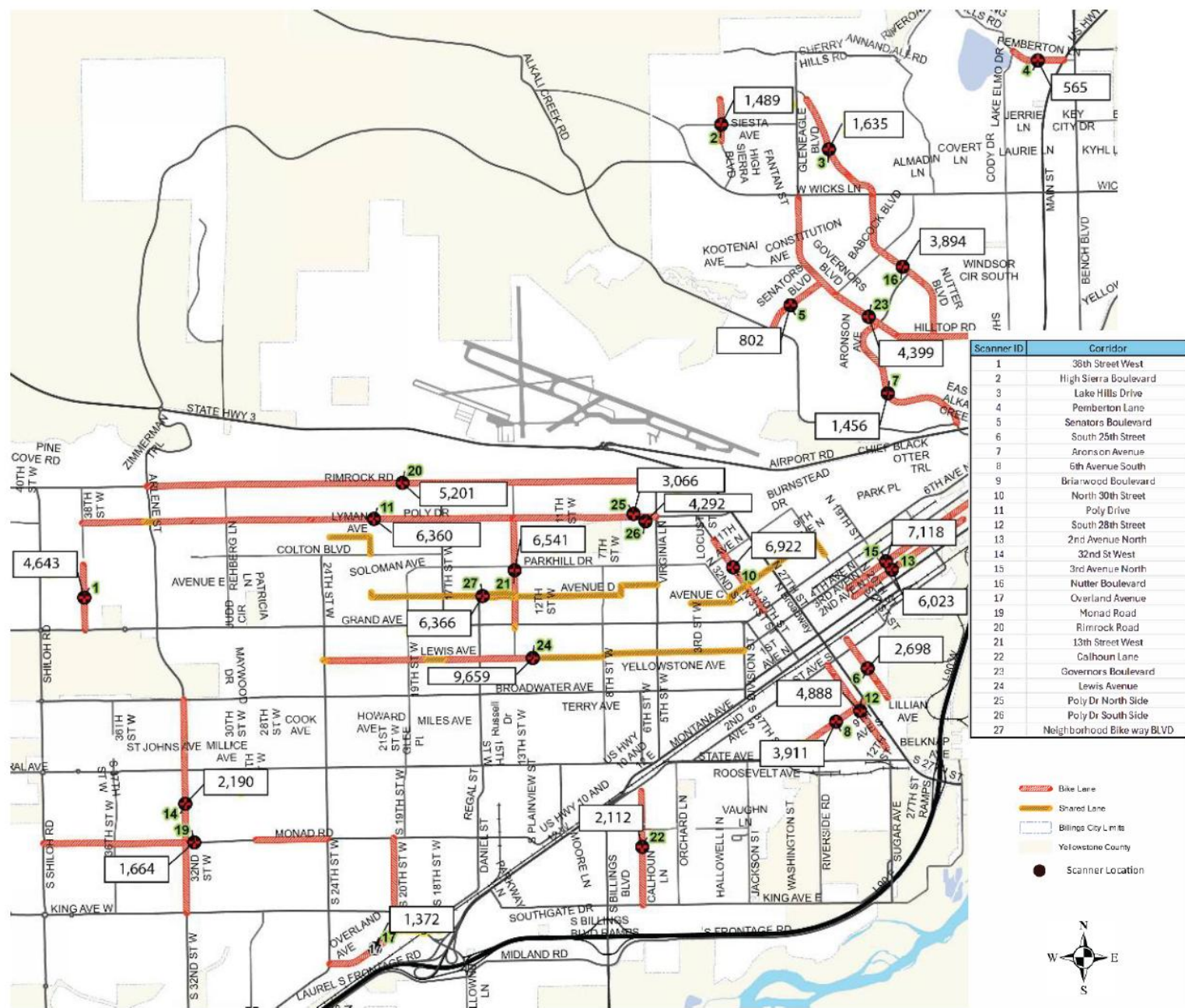
- Annual impact estimates are not being summed to represent a single cumulative property value impact. They are **aggregated only as an intermediate step in the calculation of total property tax revenues over time.**
- Tax benefits can be aggregated over time** because property taxes are assessed and collected each year. This differs from a metric such as employment, where summing annual job impacts could double count the same jobs across multiple years.
- The analysis does not claim that the North 30th Street corridor experienced a \$982 million increase in property value; rather, it uses annual differences in property values to estimate the annual property tax revenues generated over the 14-year study period.

	TOTAL COST	Actual Study Area Property Values	Counterfactual Study Area Property Values	Complete Streets Property Value Impact	Property Tax Benefit
2011	\$26,027			\$0	\$0
2012	\$4,621	\$150,161,922	\$123,853,734	\$26,308,188	\$315,698
2013	\$4,621	\$150,161,922	\$123,853,734	\$26,308,188	\$315,698
2014	\$4,621	\$148,122,709	\$122,057,633	\$26,065,076	\$312,781
2015	\$4,621	\$180,402,851	\$136,764,081	\$43,638,770	\$523,665
2016	\$4,621	\$212,682,994	\$151,470,530	\$61,212,464	\$734,550
2017	\$4,621	\$204,576,338	\$142,469,166	\$62,107,173	\$745,286
2018	\$4,621	\$235,862,383	\$144,163,481	\$91,698,902	\$1,100,387
2019	\$4,621	\$249,914,624	\$149,307,365	\$100,607,260	\$1,207,287
2020	\$4,621	\$248,768,758	\$147,943,439	\$100,825,320	\$1,209,904
2021	\$4,621	\$237,103,751	\$147,891,064	\$89,212,686	\$1,070,552
2022	\$4,621	\$219,945,257	\$144,005,199	\$75,940,058	\$911,281
2023	\$4,621	\$253,883,562	\$169,768,579	\$84,114,982	\$1,009,380
2024	\$4,621	\$268,153,229	\$175,485,900	\$92,667,328	\$1,112,008
2025	\$4,621	\$282,422,896	\$181,203,222	\$101,219,674	\$1,214,636
TOTAL	\$90,723	\$3,042,163,197	\$2,060,237,127	\$981,926,070	\$11,783,113
Benefit Less Costs				\$11,692,389	

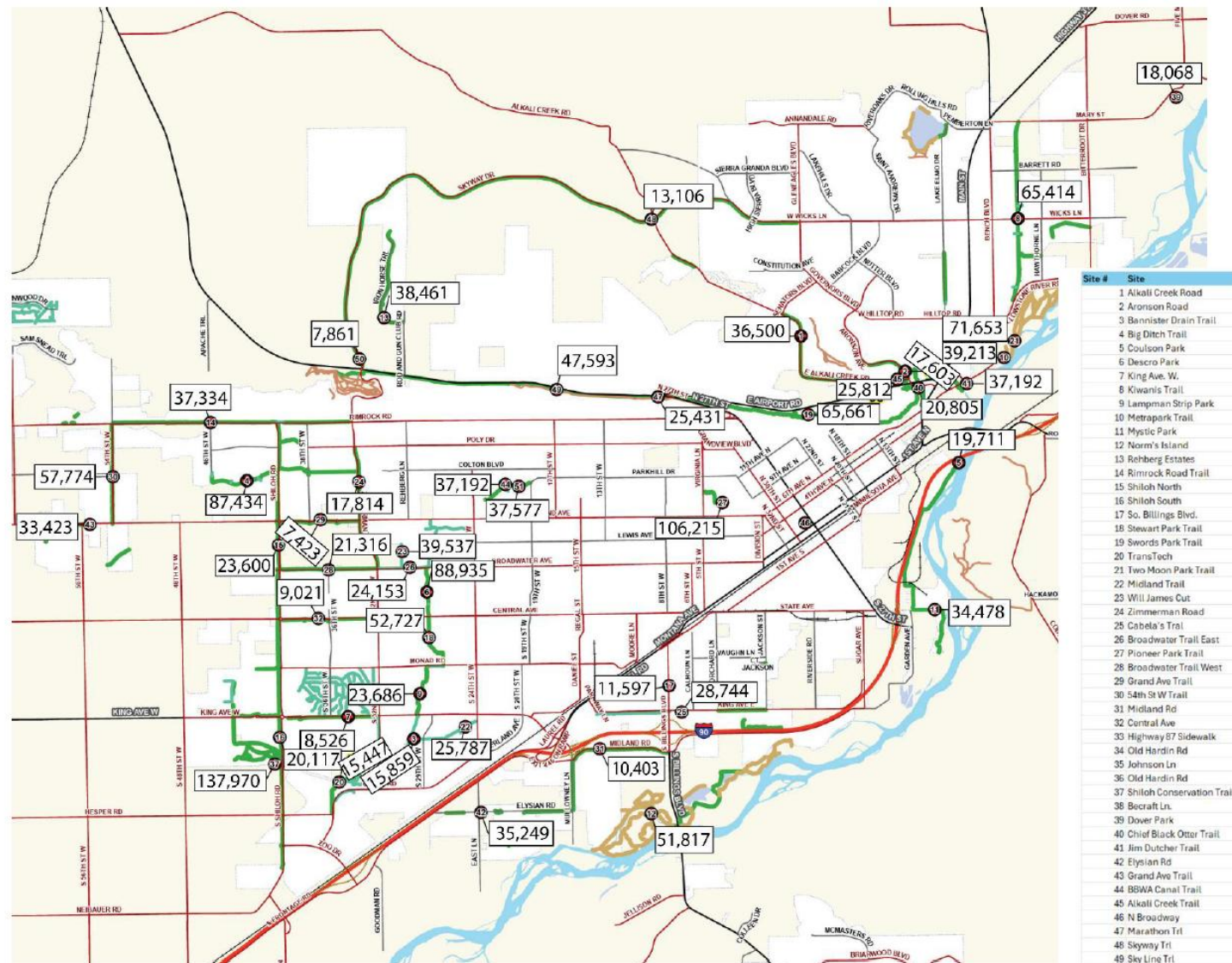
Interpretation of Tax Results

“As with other estimates in this report, these values are estimated based on several key assumptions and have associated limitations. However, taken all together, the direction and range of tax impacts can be drawn. In this case, it is clear that the case study areas outperformed the comparison areas in terms of property values, which has led to substantial increases in property tax revenues each year.”

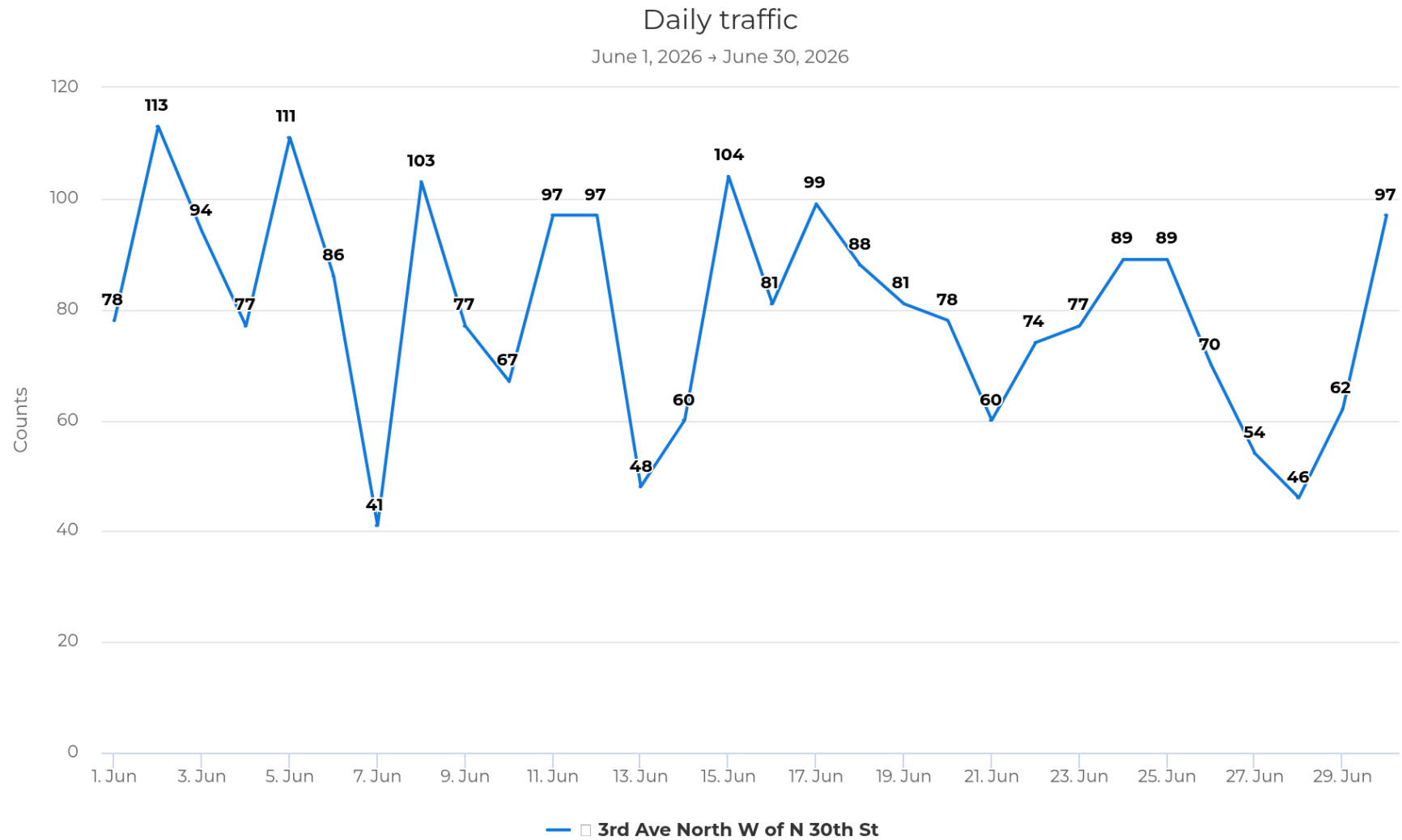
Annual Estimated Bike Lane Counts

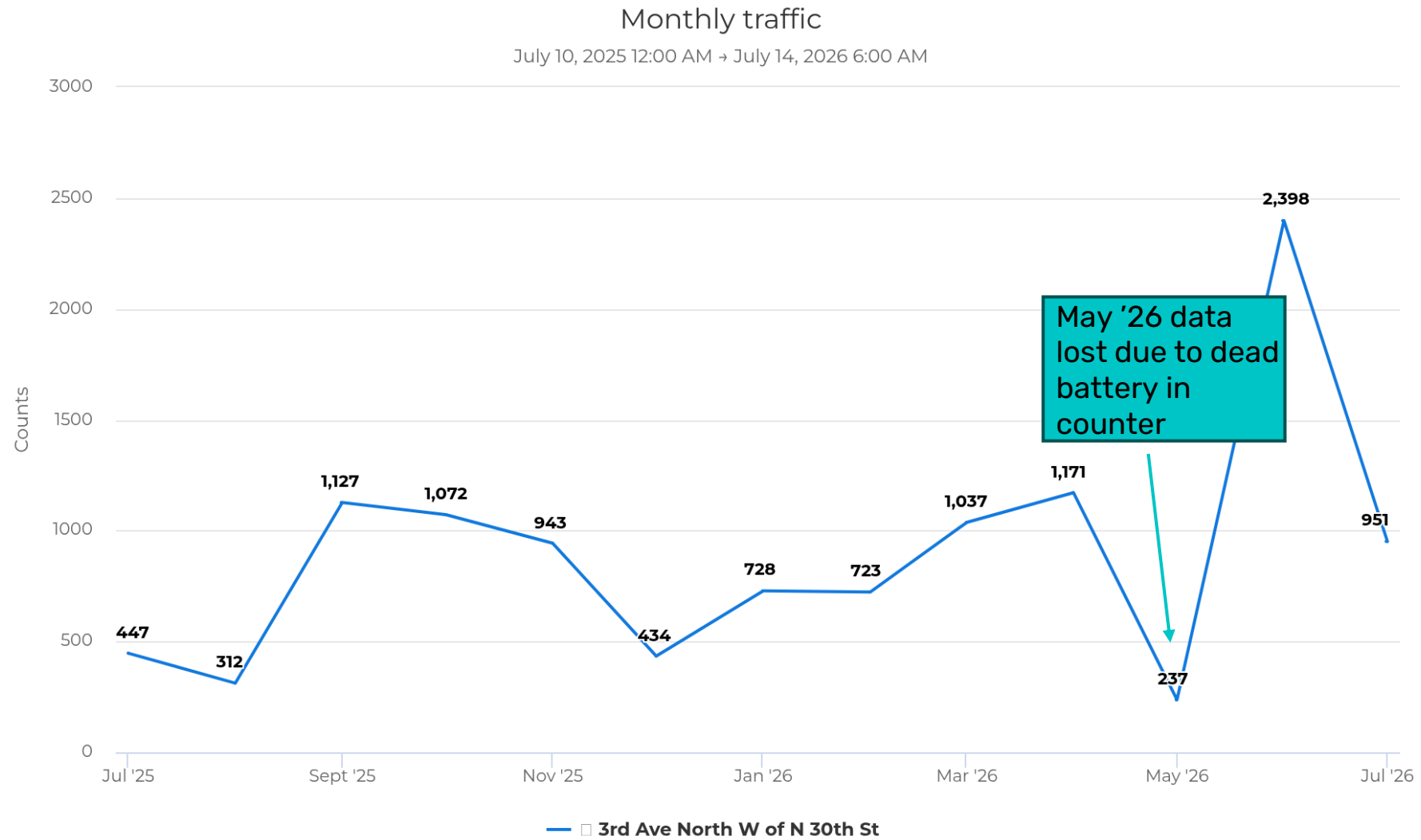


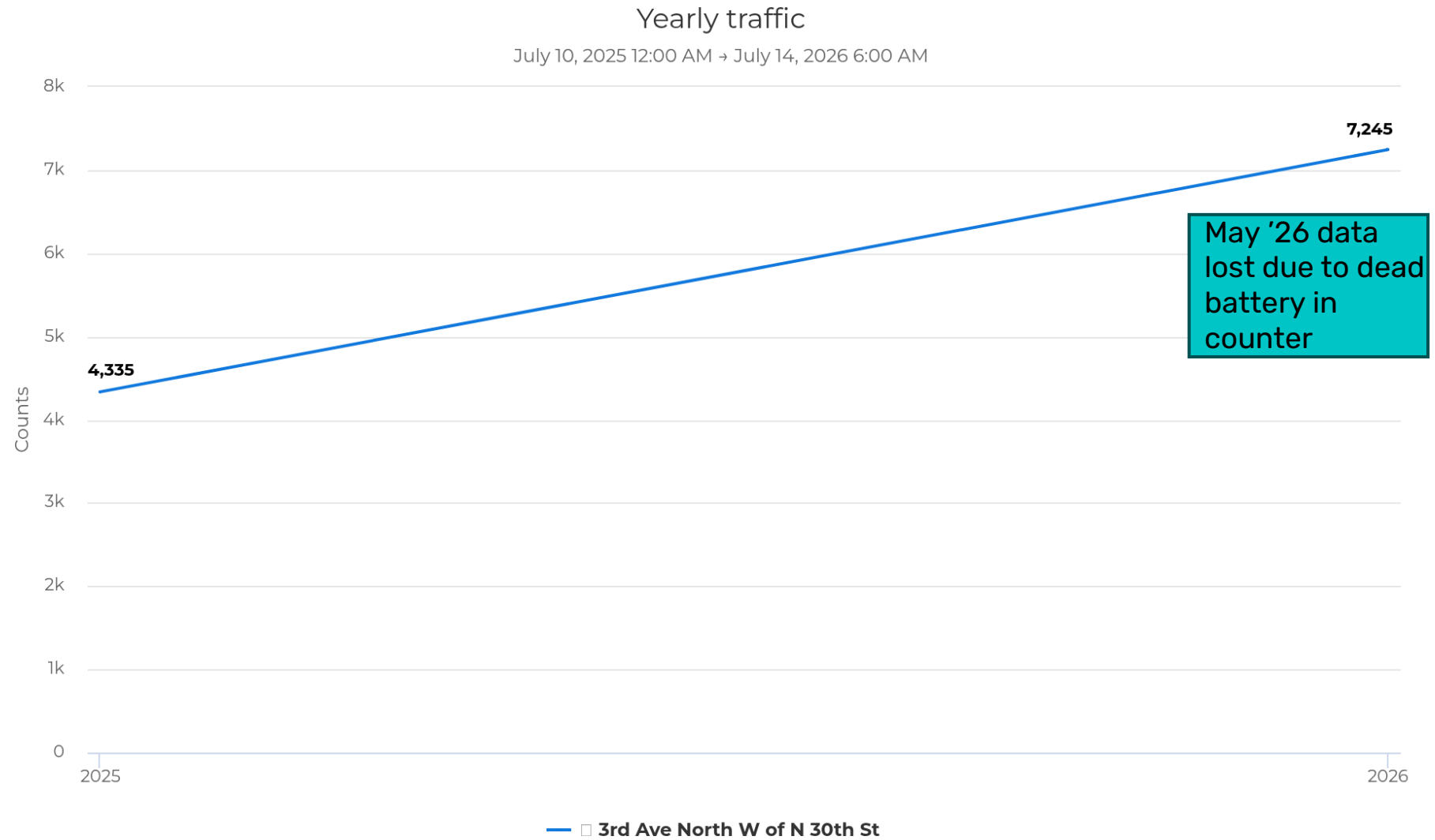
Annual Estimated Trail Counts



Annual trail counts are calculated using seasonal adjustment factors. There were an estimated 952,000-1,678,000 trips annually on counted multi-use paths in 2025.







Community Impacts

Stakeholders from Downtown Billings Association, Living Independently for Today & Tomorrow (LIFTT), Big Sky Economic Development, Billings Chamber of Commerce, Shiloh Commons, and Intermountain Health shared that Complete Streets improve...



Case Studies in Other Areas

Economic Effects of Main Street Highways in Small Cities in Minnesota (2022)

Scope: Examines nine small cities in Minnesota

Method: Qualitative interviews and difference-in-differences econometric model

Findings: Complete Streets projects are associated with rising property values and positive, though statistically insignificant, changes in gross sale

The Economic Benefits of Sustainable Streets in New York City (2013)

Scope: Evaluates multiple street improvement projects in New York City

Method: Primarily and difference-in-differences approach using retail sales data

Findings: Across most corridors, retail sales increased more on Complete Streets than at comparable locations

An Economic Analysis of Complete Streets Policies in New Jersey (2016)

Scope: Analyzes 324 municipalities across New Jersey

Method: Difference-in-differences style analysis of home prices

Findings: Home values rose 7% (\$30,200) in Complete Streets communities but fell in comparison communities

An Economic Summary on the Benefits of Complete Streets (2021)

Scope: Literature review of academic research and real-world examples of Complete Streets impacts

Method: Review of research studies

Findings: Meaningful improvement in safety outcomes and mobility and well as higher property values, stronger retail performance, and increased private investment

Conclusions and Next Steps

- Despite some data limitations, this analysis points to **strong evidence that Complete Streets investments increase property values, support business growth, and improve quality of life and accessibility.**
- Increases in **property tax revenues more than offset construction and maintenance costs** within a relatively short timeframe.
- Results from **outreach with local stakeholders confirm the community benefits** associated with Complete Streets, including public perceptions, accessibility, business development, connectivity, and access to critical services.
- **Ongoing data collection and performance monitoring** will help the City better understand long-term outcomes and refine future investments.



Source: Rattner, Mark. NonStop Local. New bike facilities open in downtown Billings for safer cycling.

Lessons Learned – MPO Perspective

- More pre-project data collection needed.
- Viewed this as a technical analysis and didn't have a steering committee – would do this in the future to help select case studies.
- Potential bias on undeveloped corridors – more greenfields means more opportunity for development.
 - Difficult to select corridors with “less” Complete Streets in the same growth situation.
- Separating out construction and maintenance costs for just Complete Streets elements can be difficult. Quantities and activities tend to be lumped together.
- Can be difficult to separate out Complete Streets effects from overall transportation corridor construction and reconstruction effects.

MPO Review Process

- Project going through the MPO's review process in which each body forwards a recommendation to the Policy Coordinating Committee (PCC) which takes final action
- This study is informational only; no future infrastructure investments are recommended as part of the study
- Expected action schedule:
 - Technical Advisory Committee – July 9
 - Planning Board – July 14
 - City Council – July 27
 - Board of County Commissioners – July 28
 - Policy Coordinating Committee – August 18



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