



# Economic Benefits of Physical Activity in Plano Parks & Trails

Plano provides many outdoor recreation opportunities to residents. Research has shown that increased outdoor recreation access correlates to increased physical activity, which leads to many health benefits and ultimately reduces long-term healthcare costs. Spending time in nature also enhances mental health and wellbeing, and reduces stress, anxiety, and depression.<sup>1</sup>

## Methodology

In this analysis, Trust for Public Land (TPL) estimated the economic benefits of increased physical activity in Plano residents due to exercise in Plano parks and trails. TPL estimated the annual value of avoided healthcare costs for residents who use outdoor spaces to meet recommended physical activity guidelines. TPL previously conducted this analysis in 2017.

First, TPL conducted a telephone survey of Plano residents in August 2024, using a random sample based on the city's demographics. The survey estimates park use patterns (including frequency, duration, and types of activity) for residents across different races and ethnicities, household incomes, education levels, and ages.

Second, TPL identified how many adults use Plano parks and trails, how often, and at what intensity, based on their activity. The analysis focused on moderate and vigorous activities like running and cycling that would result in health care cost savings. Next, TPL compared park visit data to the guidelines set by the U.S. Centers for Disease Control and Prevention (CDC). The CDC defines sufficient activity as at least 150 minutes of moderate-intensity activity per week or at least 75 minutes of vigorous-intensity activity per week, along with muscle-strengthening activities at least two days per week.<sup>2</sup>

Finally, TPL estimated the healthcare savings per person and in aggregate based on economic studies that show physical activity correlates to healthcare cost savings.

## Results

### TPL finds that 19,753 adults in Plano exercise in parks to a degree that meets the U.S. physical activity guidelines.

Based on previous work in health care economics, TPL assigns a per person value of \$1,542 (adults aged 18 to 64) and \$3,097 (65 and over) as the annual medical cost savings for adults. These annual values reflect the benefits of increased physical activity only and reflects cost savings in comparison to people who do not meet the CDC guidelines.

### Across all residents who use Plano parks and trails for high-intensity exercise, the total annual healthcare cost savings is \$33.6 million.

These results reflect an increase in the annual healthcare cost savings estimated at \$27.3 million (2024\$) in the 2017 study. **The 2024 results reflect a 23.2% increase in cost savings and a 19.7% increase in people who use Plano parks and trails to meet recommended physical activity levels since 2017 analysis.**

Consistent with the 2017 analysis, residents must use the parks, trails, open spaces, and facilities in Plano exclusively to meet these physical activity guidelines. The results of this analysis should therefore be considered a minimum value for the annual healthcare cost savings associated with the parks, trails, open spaces, and facilities in Plano. It also allows the results to be attributed to the spaces managed and maintained by Plano Parks and Recreation.

## References

- (1) Lackey, N. Q., et al. (2019). "Mental health benefits of nature-based recreation: a systematic review." *Annals of Leisure Research* 24(3): 379-393.
- (2) U.S. Department of Health and Human Services. "Physical Activity Guidelines for Americans: 2nd Edition." Washington, D.C. 2018.

Category	Value (2024\$)	Percent Change from 2017 Study
<b>Adults 18-64</b>		
Number of adults (18-64) physically active in parks	17,700	17.2%
Average annual medical care cost difference between active and inactive persons between 18-64 years old	\$1,545	<i>no change</i>
Subtotal of health care benefits (18-64)	\$27.3 million	18.5%
<b>Adults 65 years of age and older</b>		
Number of adults (65+) physically active in parks	2,000	44.9%
Average annual medical care cost difference between active and inactive persons over 65 years old	\$3,133	<i>no change</i>
Subtotal of health care benefits (65+)	\$6.3 million	48.9%
Total adults physically active in parks	19,700	19.6%
Total annual value of health benefits from parks	\$33.6 million	23.2%



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