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White Paper:
**An Economic Summary on
the Benefits of Complete Streets**
September 2021



Photo source: City of Las Vegas



What are “complete streets”?

The Regional Transportation Commission of Southern Nevada (2012) mentions that Complete Streets include the following design elements:

Promote walking, bicycling, and transit riding

Provide multiple travel options for those with limited access to cars

Reduce harmful emissions by encouraging non-motorized transportation

Improve safety of multiple modes, especially for pedestrians and cyclists

Improve health conditions with increased physical activity such as walking and cycling

Improve the economic situation for communities with a possible increase in private investment



Photo source: The City Fix



What jurisdictions in Nevada have complete streets?

City of Las Vegas

Henderson

Boulder City

Reno



Photo source: The New York Times



FINDINGS: Impacts of “Complete Streets”

Safety

Designing streets for pedestrian travel can reduce accidents by **70 percent**; for example, Wells Avenue in Reno experienced a **45 percent decline** in collisions from **128 to 71** after the Complete Streets project, and injuries related to collisions also fell from **45 to 18**.

The value of these safer conditions in Reno within one year was estimated to be **5.8 million**, exceeding its entire project cost of **4.5 million** (Smart Growth America, 2015).

Complete Streets with bicycle facilities can reduce crash risk by as much as **60 percent** with a bicycle lane or shared lane according to Hamann and Peek-Asa (2013).

Nevada has the **7th** highest pedestrian fatalities per 100,000 population with **1.34**, above the U.S. average of **0.90** (Spotlight on Highway Safety, 2021).



FINDINGS: Impacts of “Complete Streets”

Mobility

Complete Streets projects provide mobility for all modes of transportation and encourage more multimodal travel, which helps those with limited access to automobiles such as young people, visitors, elderly, lower-income, and the disabled (Smart Growth America, 2015; Clifton et al., 2014).

Zlatkovic et al. (2019) estimated that increased street connectivity can result in a significant reduction in network travel times and delays, ranging **between 9 and 24 percent**, with a more balanced distribution of traffic flow.



FINDINGS: Impacts of “Complete Streets”

Economic

Complete Streets reduces the average cost of individual’s transportation spending; for instance, residents in Dallas, TX could save an average of **\$9,026** annually by taking transit instead of driving personal vehicles (Smart Growth America, 2016b).

Pivo and Fisher (2011) discovered that a one-unit gain in Walk Score can result in value premiums for office, retail, and apartment properties of **0.9, 0.9** and **0.1 percent**, respectively, and Steuteville (2021) find that walkable and well-connected areas can increase tourism.

Walking and cycling improvements enhance access to education, health, and employment opportunities, particularly for lower-wage employees as they likely have limited access to a car (Litman, 2021).

Complete Streets can contribute to reducing obesity and risk of chronic disease, which leads to reduce healthcare spending (Smart Growth America, 2015)



FINDINGS: Impacts of “Complete Streets”

Environment

In 1993, Portland instituted Complete Streets, which encourage walking and biking as an alternative to driving and resulted in a **12.5 percent** decrease in CO2 emission per capital over a 20-year period (Smart Growth America, 2016a).

Complete Streets can increase space for green areas and open space for planting more trees, resulting in environmental benefits like reducing noise pollution, heat islands, and air pollution (*Streets for Environmental Sustainability*, 2018).

Derek Kauneckis, Associate Research Professor with the Desert Research Institute, is currently studying the impact of “urban forests” in desert cities, including Las Vegas, to help mitigate urban heat island effect and its appeal for storefront retail.



Further consideration

- Complete streets are dependent on density.
- To take advantage of the full benefits and minimize the costs, complete streets need to be designed with many of the elements mentioned, not just one.
 - E.g. the benefits of increased mobility options and wider pedestrian sidewalks are limited without also taking into account increased pedestrian and traffic safety.
- Examples where complete streets in Clark County may work include:
 - Parts of Maryland Parkway, Tropicana, Desert Inn, or other major traffic corridors that have a mix of employment, retail, and basic services.
 - Around existing large academic campuses such as around UNLV or the several College of Southern Nevada campuses,
 - Sport facilities such as the Raiders Stadium or other large entertainment venues.
 - Workforce hubs such as the Las Vegas Medical District, downtown Summerlin, around the Las Vegas Strip and convention center, and the UNLV Harry Reid Tech Park.



References

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- **Photo sources:**
 - The City Fix: <https://thecityfix.com/blog/what-makes-a-complete-street-a-brief-guide-nikita-luke-anna-bray-sharpin-ben-welle/>
 - City of Las Vegas: <https://www.lasvegasnevada.gov/News/Blog/Detail/spend-a-day-in-18b>
 - The New York Times: <https://www.nytimes.com/2019/02/14/travel/las-vegas-neighborhood-arts-district.html>

