



Planning Minnesota's
Transportation Future

ALTERNATIVE USES OF TRANSPORTATION RIGHT-OF-WAY TREND ANALYSIS

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SUMMARY

Alternative uses of transportation right-of-way above, below or next to transportation facilities is part of this movement. Transportation agencies like MnDOT hold onto land, also known as right-of-way, for potential future mobility needs leaving many spaces that go underdeveloped and unused. The public has a right to use the land that is held in trust in a safe, equitable and unharmed way.

Alternative uses can act as a powerful catalyst for property and economic development. They can also improve quality of life when the use repairs damage done to communities from large transportation systems. Other uses can include building shelters and low-income housing, or a space for multi-sector projects to address the increasing housing shortage. Alternative uses can also be used to accommodate demand for utility space, allow opportunities to increase clean and renewable energy production, and provide strategies to revive and maximize the health of our environment.

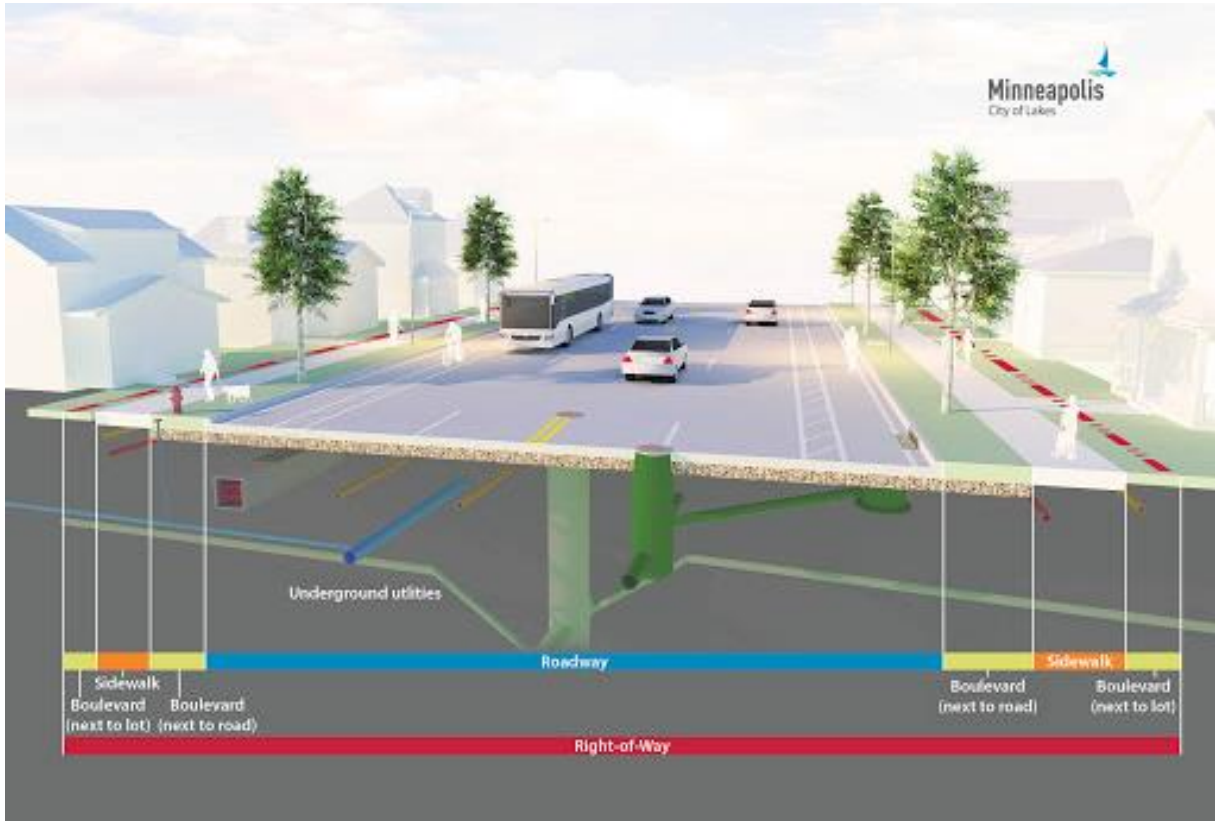
Rethinking the role of transportation right-of-way as part of the public realm opens larger conversations about how we use and design public space, how to make these places inclusive and how to negotiate the rules that govern use of public space. Alternative uses of transportation right-of-way, when implemented properly, provide community benefit, ensure a high quality of life, maximize investments and protect the environment. Encouraging communities to take creative ownership of transportation right-of-way fosters an environment for people to gather, live, learn and play in commonly underutilized vacant spaces.

WHAT IS RIGHT-OF-WAY

Right-of-way is real property or interests therein, acquired, dedicated or reserved for the construction, operation and maintenance of a highway. Right of way can refer to a strip of land which is used as a transportation corridor. It may also refer to temporary rights needed to construct a transportation facility.¹ Public right-of-way is the space between property lines that is reserved for public use. This land can include sidewalks, trails, landscaped areas, bicycle lanes, roads, underpasses, alleys, utilities, etc. Transportation right-of-way is held in trust for the public and is not owned by governmental agencies. Figure 1 shows the typical right-of-way for an urban street.

¹ Minnesota Department of Transportation, "Land Management," Accessed November 10, 2021, <http://www.dot.state.mn.us/row/index.html>.

Figure 1: Example Right-of-Way for an urban street (City of Minneapolis)



As transportation infrastructure has grown, it has increasingly become a physical barrier in communities, dividing neighborhoods and reducing gathering spaces, economic opportunities, and community cohesion. During the initial construction of the interstate in the U.S., below-grade highways tore through thriving black neighborhoods deemed “slums” by local planners. Notable examples include the neighborhoods of Rondo in St. Paul, Claiborne in New Orleans, and the Lower Hill District in Pittsburgh.² Little information exists on how much space transportation as a whole system takes up, but what is known is that much of this right-of-way is not currently actively used for transportation and is regularly unoccupied.

TRANSPORTATION AS PUBLIC SPACE

Although there is no single definition for public space, a public space is considered a place generally open and accessible to people, and includes roads, sidewalks, public squares, parks and beaches. A consistent feature is that they serve as places for people to gather and connect to goods and services. The concept and management of these spaces changes over time and the understanding of their function is based on current context.

² Bill Lindeke, “The Theory Behind the 1935 Saint Paul Slum Map,” Streets.mn, February 11, 2016, <https://streets.mn/2016/02/11/saint-paul-slum-map-1935/>.

According to a 2018 Trust for Public Land report, the median size of a park in the largest U.S. cities is 3.8 acres, a figure that has remained unchanged for several years. While some public agencies have slightly increased their capital spending on parks over the last decade, most struggle to find sustainable sources of operating funding to help increase daily operations and maintenance activities.³ With these public spaces stagnating and investment lacking, there is an increasing reliance on privatizing public spaces. Many new housing and commercial developments include open green spaces that are mostly open to the public, with uses managed by private entities. As this trend to privatize public space grows, so does the reliance on transportation right-of-way to serve the needs for public space.

Historically, transportation infrastructure was designed for commerce and recreation. However, public perception has been shifting from transportation infrastructure as a way to move people and goods to transportation as a place with inherent value beyond its ability to move people and goods. Through transportation infrastructure we are able to get to work, gather with friends outside, explore nature, etc. This shift supports the goals of transportation to provide community benefit, ensure a high quality of life, maximize investments and protect the environment.

Transportation agencies control excess, surplus and unused land for many reasons. Excess land typically comes into DOT control when a parcel of land is purchased that is larger than what is currently necessary for the transportation use or remains underutilized while serving its intended purpose. Excess land can be held for future transportation needs, sold or used for an alternative purpose. Land may be underutilized even when serving a transportation purpose. For example, land under a bridge or elevated highway or the airspace over highway could be leveraged for other purposes. More examples of other uses for surplus land can be found in the Alternative Uses section of this trend paper.

As the demand for additional uses of transportation right-of-way shifts, it highlights the need and the public's desire for governmental entities to collaborate with other disciplines to serve the public need in a more holistic way. Traditionally, transportation agencies primarily plan for transportation needs in projects. If transportation agencies are planning, designing, funding, managing and maintaining projects with agencies in charge of housing, sustainability, parks, they can provide better solutions and potentially pool resources, save on cost and improve efficiency.

RIGHT TO ACCESS

GOVERNING USE

In 1939, the Supreme Court determined that public streets and sidewalks are for “assembly, communicating thoughts between citizens, and discussing public questions.”⁴ As a result, infrastructure and right-of-way are considered to be held “in trust” and are not owned by government. Though governmental agencies don't own

³ Charlie McCabe, Alexandra Hiple, Derek Bolivar and Erin Cameron, “2018 City Park Facts,” The Trust for Public Land. Playcore, August 2018, https://www.tpl.org/sites/default/files/CityParkFacts2018.8_13_18finLO.pdf

⁴ Hague v. Committee for Industrial Organization

public space, there are many ways that governments control, restrict and govern the public use of shared space through court rulings, laws, ordinances, policies, rules, zoning, fines, and leases.

Enforcement processes vary by issue, context and community. Enforcement can involve charges, fees, fines and warnings. Monetary enforcement of behavior in public spaces can have outsized impacts on people with low incomes⁵⁶ and people who are Black, Indigenous or a person of color.⁷⁸ Fees and fines in particular are typically the same for everyone regardless of income or ability to pay. In practice, the burden is heaviest for people with low incomes. For households making less than \$25,000, a \$400 fine can be experienced as a lifechanging expense.⁹ For many, an emergency expense of \$400 could result in non-payment or the need to sell something to cover the expense, and the ability to pay varies by race.¹⁰ These rules can help facilitate free flow of people and goods through the transportation system. They can also serve to restrict rightful access to public space and to displace public discourse.

Use of public space is also dictated by the way it is designed. Bike lanes may encourage people to travel along a route they wouldn't have otherwise taken. Conversely, things like arm rests on public benches, can keep people from lying down. Design can be intended to target, frustrate and deter people of certain demographics. Other examples include playing music to deter people from sleeping¹¹, installing concrete benches with skate deterrents, using intermittent sprinklers to keep people from lingering and installing boulders along a freeway to discourage camping.¹²

PRIVATIZATION

Over time, public spaces come into and out of existence. New public spaces are built. Old designs may give way to new uses either public or private. New rules and regulations limit use. Over the past few decades, more privately owned public spaces have been created. These are indoor and outdoor spaces available for public use made available by private owners in exchange for things like more floor area or waivers as part of permitting

⁵ Alec Schierenbeck, "The Constitutionality of Income-Based Fines," *The University of Chicago Law Review*. The University of Chicago, December 2018, <https://lawreview.uchicago.edu/publication/constitutionality-income-based-fines>.

⁶ Council of Economic Advisers, "Fines, Fees and Bail: Payments in the Criminal Justice System that Disproportionately Impact the Poor," Council of Economic Advisers Reports and Issue Briefs, December 2015, https://obamawhitehouse.archives.gov/sites/default/files/page/files/1215_cea_fine_fee_bail_issue_brief.pdf.

⁷ Richard J. Lundman, Robert L. Kaufman, "Driving While Black: Effects on Race, Ethnicity, and Gender on Citizen Self-Reports of Traffic Stops and Police Actions," *Criminology* Volume 41 (2003): 195-220, <https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=201193>.

⁸ National Institute of Justice, "Racial Profiling and Traffic Stops," January 9, 2013, <https://nij.ojp.gov/topics/articles/racial-profiling-and-traffic-stops>.

⁹ The Pew Charitable Trusts, "How do Families Cope With Financial Shocks?," October 2015, https://www.pewtrusts.org/~media/assets/2015/10/emergency-savings-report-1_artfinal.pdf.

¹⁰ Jeff Larrimore and Sam Dodini, "Report on the Economic Well-Being of U.S. Households in 2015," Federal Reserve Board's Division of Consumer and Community Affairs, May 2016, <https://www.federalreserve.gov/2015-report-economic-well-being-us-households-201605.pdf>.

¹¹ Tony Doris, "West Palm uses music to move homeless from waterfront pavilion," *The Palm Beach Post*, July 16, 2019, <https://www.palmbeachpost.com/news/20190716/west-palm-uses-music-to-move-homeless-from-waterfront-pavilion>.

¹² City of San Diego, "Hawk Pocket Park Improvements (Formerly Guymon Park)," May 25, 2017, <https://www.sandiego.gov/sites/default/files/k-17-1531-dbb-3.pdf>.

negotiations with the city. Privately owned public spaces are becoming an increasingly popular way to provide public space without public expenditures.

While privately owned public spaces provide an opportunity to add to public space, especially in built-up urban areas, they do not always deliver on their goals. Privately owned public spaces are often noted as being exclusive and underused.¹³ Also, the public may not be able to determine the difference between public, semi-public, semi-private and private spaces.¹⁴ It may be unclear for people if they are allowed to be present in these spaces, what counts for permissible behavior and more broadly what rights people can enjoy while occupying the space. As more privately owned public spaces are built, these lines are likely to blur further with the increasing privatization of public space.

PUBLIC DISCOURSE AND ASSEMBLY IN TRANSPORTATION RIGHT-OF-WAY

Public discourse requires access to public spaces. The concept of the “public square” as a central gathering space for open discourse and protest dates back centuries. Unfortunately, spaces available to gather and debate are shrinking. This loss of a central gathering place has led to an increased use of transportation infrastructure for public gathering.

Transportation has a long history of being a platform for and subject of protests.¹⁵ Transportation infrastructure takes up space previously occupied by people. In many communities around Minnesota and the US more broadly, transportation infrastructure represents a legacy of decisions that led to the destruction of people’s homes, businesses, communities of faith and livelihoods. When current governmental agency actions are seen as further acts of harm, transportation itself becomes a platform to fight injustice.

As a public good, transportation is subject to the same equal access protection unless rules otherwise limit access.¹⁶ Members of the public have competing claims to transportation space—people wanting to travel and people wanting to make their voices heard both have a right to this space. Fewer spaces for freedom of expression and ongoing injustice make these spaces both more common and divisive venues for expression.

In recent years protesting on highways and disrupting light rail service has become more common in the Twin Cities. Legislation in Minnesota has been proposed multiple times to increase penalties to discourage protesters from endangering others by marching on freeways.¹⁷ Public assembly can pose safety risks such as delaying emergency services’ ability to provide immediate lifesaving medical care. Transportation agencies aim to balance

¹³ Dahae Lee, “Whose space is privately owned public space? Exclusion, underuse and the lack of knowledge and awareness,” *Urban Research and Practice*, September 15, 2020, <https://www.tandfonline.com/doi/full/10.1080/17535069.2020.1815828>.

¹⁴ Dahae Lee, “Whose space is privately owned public space? Exclusion, underuse and the lack of knowledge and awareness,” *Urban Research and Practice*, September 15, 2020, <https://www.tandfonline.com/doi/full/10.1080/17535069.2020.1815828>.

¹⁵ Julian Hipkins III and David Busch, “Transportation Protests: 1841 to 1992,” Accessed October 15, 2021, Civil Rights Teaching, <https://www.civilrightsteaching.org/desegregation/transportation-protests>.

¹⁶ Julian Hipkins III and David Busch, “Transportation Protests: 1841 to 1992,” Accessed October 15, 2021, Civil Rights Teaching, <https://www.civilrightsteaching.org/desegregation/transportation-protests>.

¹⁷ Jessie Van Berkel, “Minnesota House passes stronger penalties for freeway protests, despite impassioned opposition,” *Star Tribune*, May 9, 2018, <https://www.startribune.com/house-passes-harsher-freeway-protest-penalties-despite-impassioned-opposition/482112141/>.

use of public spaces as a platform for public discourse with goals for the system, which are not independent from fundamental rights to speech and assembly – and the right to use public space for assembly.

ALTERNATIVE USES

Using transportation right-of-way for non-transportation purposes is not new, but the demand for new uses of these spaces is increasing. Through MnDOT’s public engagement efforts, the public, stakeholders and partners are asking the state to create new uses for the land the agency holds in trust. Alternative uses can be planned and unplanned. Encampments and impromptu public assembly are examples of unplanned use and can be disruptive. Planned alternative uses can be coordinated with local governments, other public entities or private partners and often involve improvements to the property or additional infrastructure including landscaping, public art, recreational amenities or even buildings. Planned alternative uses have agreements in place defining roles and responsibilities for funding, maintenance and programming of the space.

MnDOT’s right-of-way includes many spaces that can be used in new ways:

- **Freeway caps:** One alternative use that is increasing across the country is the use of freeway caps in highway airspace that can provide space for new parks or other commercial development over highways. Freeway caps can be used to reconnect communities that have been divided because of highway construction and they can also spur economic development. In Minnesota there are several freeway cap examples including Leif Ericson Park in Duluth, Target Field Plaza in downtown Minneapolis and Minnehaha over Hiawatha.
- **Under bridges:** Alternative non-highway uses are also seen under bridges and elevated highways. These uses also help connect communities that have been divided because of the highway construction.
- **Adjacent:** Surplus and underutilized land adjacent to the highway provides another opportunity for alternative uses, such as when MnDOT partnered with a solar developer to construct a community solar garden on the site of a former gravel pit near the City of Afton.
- **Temporary Uses:** Alternative uses can also be temporary. MnDOT issues parade and event permits for temporary uses. Parklets¹⁸ can also be installed temporarily in on-street parking stalls along trunk highways.

BENEFITS OF ALTERNATIVE NON-TRANSPORTATION USES

ECONOMIC IMPACTS

Financial analyses have demonstrated that building a highway cap can be a powerful catalyst for property and economic development. Perhaps the most famous example is Klyde Warren Park in Dallas Texas. Built on a cap over a state highway, the park is credited with transforming the downtown Dallas real-estate market. A recent

¹⁸ Parklet: a small seating area or green space created as a public amenity on or alongside a sidewalk, especially in a former roadside parking space

example is Capital Crossing, a 2.2 million square foot mixed use development over I-395 in Washington DC. Transportation corridors are reimaged as developable property especially where land prices are high and land is scarce. In the Rondo community of Saint Paul, making new use of underutilized I-94 right-of-way and airspace is viewed as the alternative to displacement. Capping the highway is also seen as a restorative act, one that may recover some of the property lost when the highway was constructed.

QUALITY OF LIFE

In Minnesota and around the country, transportation agencies are trying to reduce highway footprints to recover some of the land occupied by highways. Highway caps and other use of right-of-way improve quality of life when the use reduce the noise, appearance and barrier to cross movement that are common features of urban highways. For example, most highway caps are park or plaza spaces that enhance the setting. Current Minnesota examples include parks spaces over I-35 in Duluth and Longfellow Gardens over Highway 55 in Minneapolis. Fort Snelling and the Minnesota History Center sites feature caps that provide a more suitable and pleasant setting. Residential park caps such as those in Seattle, Washington in effect erase the presence of the highway below.

ENCAMPMENTS

HOMELESSNESS

People experiencing homelessness seek safe shelter, often on transportation right-of-way. The scale of an encampment can range from a single person to a community of people living in the right-of-way. Encampments are unplanned alternative uses of transportation right-of-way. Those living in the encampments do not hold permits or a formal agreement with the transportation agency that manages the land, as it is practice not to allow encampments on right-of-way. Transportation agencies are developing staff capacity to respond to encampments, coordinate with social service organizations and collaborate with other agencies to combat the conditions creating homelessness in the first place.

In south Minneapolis, the Wall of Forgotten Natives is a MnDOT-owned property and the location of a large homeless encampment. In 2018, this encampment catalyzed an unprecedented amount of collaboration between state, local, tribal and non-profit organizations to find safer shelter and housing situations for the people located in this encampment.¹⁹ During the COVID-19 pandemic, the encampment grew and fears of additional challenges the homeless populations face related to the spread of COVID-19 increased. Minnesota Governor Tim Walz instituted an executive order that barred sweeping or disbanding new or existing encampments anywhere.²⁰ This executive order illustrates Minnesota's recognition that people experiencing homelessness have a right to camp on public land, especially in the interest of protecting and preserving public health and safety.

¹⁹ Jessica, Miles, "Native American homeless encampment grows at Hiawatha and Franklin, community demands housing support," KSTP.com, September 3, 2020, <https://kstp.com/news/native-american-homeless-encampment-grows-at-hiawatha-and-franklin-community-demands-housing-support-september-3-2020/5850723/>.

²⁰ "Protecting the Rights of Health of At-Risk Populations during the COVID-19 Peacetime Emergency," Emergency Executive Order No. 20-55, Tim Walz, Governor of the State of Minnesota, 2020, <https://www.leg.mn.gov/archive/execorders/20-55.pdf>.

HOUSING

Transportation right-of-way can be a creative solution to help alleviate increasing demand for affordable housing. As more people are concentrated in certain communities, demand for more housing and more affordable housing is going up. The supply of housing in the Minneapolis-St. Paul metropolitan area has not kept pace with the population. In Minneapolis, for example the median sales price for a home increased nearly 8% from \$315,000 to \$340,000 between October 2020 and October 2021²¹.

Housing cost burden tends to fall on lower-income households, whose wages have stagnated more than other demographic groups.²² As land use planners and community developers look into options to increase the affordable housing stock, transportation right-of-way could be used for planned housing instead of unplanned encampments. Communities like Minneapolis have noted that this reclaimed space could be used for housing as well as employment, green space, clean energy and more.²³

In Saint Paul, conversations about the Rondo Community Land Bridge include creating 500 new housing units. Construction of I-94 in the 1960s destroyed homes and disconnected communities, including the Rondo neighborhood in Saint Paul. The land bridge is noted as an opportunity to ensure affordable housing to help deliver a full range of housing choices.²⁴

Transportation agencies could coordinate with other public and private partners to make property adjacent to transportation right-of-way or even airspace over transportation right-of-way part of multi-sector projects to address the housing shortage. One such project is the Newtown Pike project in Lexington, Kentucky. This project integrated a neighborhood redevelopment plan along with its transportation-related goals.²⁵ To mitigate the removal of housing, the project developed housing to replace the neighborhood that was impacted by the transportation project.

ENERGY AND UTILITIES

The right-of-way, especially in urban areas, is becoming more and more crowded, making it more challenging to accommodate requests for utility placements in transportation right-of-way. In the future, most transportation modes will likely be connected to the internet and dependent on electricity, putting more emphasis on transportation right-of-way to accommodate this demand for utility space and keep Minnesotans moving.

²¹ Minneapolis Area Realtors, "Monthly Indicators," November 23, 2021, <https://maar.stats.10kresearch.com/docs/mmi/x/report?src=page>.

²² City of Minneapolis, "Minneapolis 2040 – The City's Comprehensive Plan," Minneapolis|2040, October 25, 2019, <https://minneapolis2040.com/pdf/>.

²³ City of Minneapolis, "Freeway Remediation: Recover and repurpose space taken by construction of the interstate highway system in Minneapolis and use it to reconnect neighborhoods and provide needed housing, employment, greenspace, clean energy and other amenities consistent with City goals," Minneapolis|2040, October 25, 2019, <https://minneapolis2040.com/policies/freeway-remediation/>.

²⁴ Minnesota Department of Transportation, "Rethinking I-94 Phase 1 Report," August 1, 2018, <http://www.dot.state.mn.us/i-94minneapolis-stpaul/pdf/vision/phase-1-report.pdf>.

²⁵ Phil Logsdon and Stuart Goodpaster, "Newton Pike Extension Project Sustainable Practices," Kentucky Transportation Cabinet, 2014, https://transportation.ky.gov/Planning/Documents/11Newtown%20Pike_Logsdon_GoodPaster2014.pdf.

INTERNET

When planning for a connected and automated transportation future, state and local transportation agencies are exploring how they could support the growth of 5G cellular networks in addition to traditional broadband internet connections. Many cities, such as Portland, Oregon, have permitting guidelines for wireless companies to deploy cell towers on streetlights and in the public right-of-way.²⁶ Often these roadway networks are referred to as connected corridors. The corridors support communications infrastructure and Vehicle-to-Infrastructure (V2I) technology that allows the exchange of information between vehicles and equipment at intersections.²⁷ For more on the future of connected transportation technology, see the Cybersecurity and Tech and Web Access trends.

RENEWABLE ENERGY

Transportation departments are also exploring ways to increase clean and renewal energy production. MnDOT, for example, is exploring how solar energy development on our right-of-way can help meet MnDOT energy needs, reduce long-term operational costs and limit greenhouse gas emissions.

MnDOT recently installed solar panels on the ABC Ramps in downtown Minneapolis. These ramps, built over I-394, are owned by MnDOT and managed by the City of Minneapolis. Cooperative Energy Futures (CEF) now operates a community solar garden on Ramp A. The solar garden uses 3,760 panels and is expected to produce 1.4 MWh of electricity each year. MnDOT also partnered with a solar developer to install an 11-acre community solar garden on a former gravel pit site near the City of Afton. This is the first ground mounted community solar garden project on MnDOT-owned right-of-way.

Other states are also incorporating solar into their transportation right-of-way. In west Georgia, an 18-mile stretch of I-85 was renamed “The Ray Highway,” a nod to its use of solar to create a net-zero highway.²⁸ And in Oregon, ODOT partnered with Portland General Electric, Oregon’s largest utility; Solar World US, Oregon’s and the nation’s largest solar manufacturer; and PV Powered, Oregon’s and the nation’s largest inverter manufacturer to create the world’s first “Solar Highway.” The corridor, situated at the interchange of I-5 and I-205, utilizes solar panels installed along highway right-of-way to light the interchange.²⁹ For more on renewable energy, see the Alternative Fuels trend.

²⁶ City of Portland, “Vertical Infrastructure in the Public Right-of-Way,” Portland Bureau of Transportation, Accessed September 1, 2020, <https://www.portlandoregon.gov/transportation/78507>.

²⁷ Minnesota Department of Transportation, “MnDOT Connected Corridor Initiative,” 2018, <https://www.dot.state.mn.us/its/projects/2016-2020/connectedcorridors/conopssummary.pdf>.

²⁸ “The Ray Today,” Theray.org, Accessed October 18, 2021, <https://theray.org/technology/the-ray-today/>.

²⁹ Oregon Department of Transportation, “Oregon Solar Highway Program,” State of Oregon, Accessed October 18, 2021, <https://www.oregon.gov/odot/Programs/Pages/Solar-Highway.aspx>.

ENTERTAINMENT, LEARNING AND RECREATION

Public spaces are social spaces and great places to play, learn and exercise. Landmarks, interpretive signs, and other cultural elements can make public spaces more interesting for all users. Transportation right-of-way can be reassigned for different uses that do not serve a mobility purpose, but instead let people gather, learn and play.

Minnesota has many examples of right-of-way being used for these types of purposes. The city of Hopkins has a lease with MnDOT for a skate park under Highway 169. In Wabasha, the River Junction Arts Council programs a weekly free concert series called Meet Me Under the Bridge. The Minneapolis Parks and Rec Board has managed a Tot Lot adjacent to I-35W since 1968. In Chaska, the Hawks Ridge Mountain bike trail sits on transportation right-of-way adjacent to Highway 212.

NATURAL ENVIRONMENT

Transportation infrastructure cuts through diverse ecosystems of land, water, plants, fish and wildlife that use these areas for habitat and food. Infrastructure can divide habitats making it difficult for wildlife to safely navigate through its habitat. Transportation introduces invasive species by making international and intercontinental travel much easier and more frequent. In general, habitat loss, degradation and fragmentation are the three leading causes of biodiversity decline in the state, and all three can be tied to transportation infrastructure.

Transportation right-of-way can also be used to protect the environment, improve water quality and provide aesthetically pleasing landscapes. For more on the intersection of the transportation system and the natural environment, see the Biodiversity, Air Quality and Water Quality trends.

Here are some of the ways transportation right-of-way is being used to maximize the health of our environment:

- **Providing pollinator habitat:** MnDOT manages approximately 175,000 acres of green space in Minnesota. The agency currently plants native plants on 30% of construction projects where soil beyond the in-slope is disturbed.
- **Managing animal migration:** Wildlife struggle to cross highways just like people do. Transportation agencies support migration through safe, unobstructed wildlife crossings. Underpasses, overpasses, tunnels, fences and more help animals move safely around and across transportation infrastructure. In 2019, MnDOT and the Local Road Research Board issued the Minnesota Guide for Stream Connectivity and Aquatic Organism Passage.³⁰
- **Composting of animal carcasses:** Deer composting locations receive roadkill deer from the state highway system in the metro area.
- **Managing blowing and drifting snow:** Living snow fences are trees, shrubs, native grasses, wildflowers, or even rows of corn or haybales located along roads or around communities and farmsteads. These living barriers trap snow as it blows across fields, piling it up before it reaches a road, waterway, farmstead or

³⁰ <http://www.dot.state.mn.us/research/reports/2019/201902.pdf>

community. In addition to improving driving safety and increasing crop yields by 10% or more, living snow fences also control soil erosion and provide wildlife habitat.

- **Enhancing landscapes:** Programs like MnDOT’s Highway Sponsorship Program allows businesses, civic organizations and individuals to assist with the improvement and maintenance of real property comprising the trunk highway system to install and maintain landscaping, create pollinator habitat and pick up litter along highway roadsides.

PANDEMIC AND PUBLIC SPACE

The COVID-19 pandemic has helped illustrate the role of transportation right-of-way as public space. Cities rapidly adapted roads, parking lots and other assets to meet people’s needs to get to work, gather with others outside and support businesses safely. Underused parts of streets became cafes. Parking lots and even airports became drive-in movie theaters.³¹ School buses brought WIFI to neighborhoods to support distance learning in communities lacking internet access. Sidewalks and on-street parking stalls were converted into temporary outdoor dining spaces. At the beginning of the pandemic, Minnesota Governor Walz instituted an executive order that barred sweeping or disbanding new or existing encampments anywhere.³² While the long-term impacts of the pandemic on transportation and travel are not yet known, people are more aware of the way transportation right-of-way can be used to meet their needs beyond mobility and accessibility.

MNDOT INITIATIVES

MnDOT has implemented several program opportunities to promote alternative uses of transportation right-of-way. While the following is not an exhaustive list of these opportunities, it illustrates a range of programs that have already been implemented throughout Minnesota.

CENTER FOR COMMUNITY CONNECTIONS

MnDOT’s Center for Community Connections aims to connect people to opportunities and services. The buildout of the interstate system through the 20th Century may have made car travel more efficient and easier than ever before, but it bisected many communities in US cities. Economic opportunities include options to connect people with jobs, housing, education, health care, healthy food, and more.

The Center for Community Connections supports people through transportation innovations, partnerships and technologies by

- Engaging communities more effectively

³¹ Fox 12 Staff, “Portland airport hosts first-ever drive-in movie,” Fox 12 Oregon, July 17, 2020, https://www.kptv.com/news/portland-airport-hosts-first-ever-drive-in-movie/article_68561682-c8ad-11ea-b50c-83231160e786.html.

³² “Protecting the Rights of Health of At-Risk Populations during the COVID-19 Peacetime Emergency,” Emergency Executive Order No. 20-55, Tim Walz, Governor of the State of Minnesota, 2020, <https://www.leg.mn.gov/archive/execorders/20-55.pdf>.

- Improving access between and across modes
- Revitalizing communities
- Enhancing economic opportunities³³
- Navigating process, policy, procedures, agreement types; document statutes and federal U.S. code governing use; conducting risk assessments
- Coordinating funding, maintenance, programming, collaboration with other disciplines, agencies, jurisdictions, local governments and private partners

COMMUNITY ROADSIDE LANDSCAPE PARTNERSHIP PROGRAM

The Community Roadside Landscaping Partnership Program is designed to provide technical and financial assistance to communities that are interested in landscaping state highway right-of-way. This program helps MnDOT connect with communities, promote community identity, provide another opportunity to be an environmental steward and beautifies our roadsides.

HIGHWAY SPONSORSHIP PROGRAM

MnDOT’s Highway Sponsorship Program allows businesses, civic organizations and individuals to assist with the improvement and maintenance of transportation right-of-way³⁴. This can include but is not limited to installing and maintaining landscaping, creating pollinator habitat and picking up litter along highway roadsides. Highway Sponsorship Agreements are typically three to five years in duration, and projects may be eligible for a roadside sponsor acknowledgement sign.

ART ON THE HIGHWAY

MnDOT has established a policy to allow for donations of art for placement on highway right-of-way. MnDOT’s Art on the Highway policy encourages creativity in all its forms and offers broad opportunities for participation. This policy has led to the implementation of a process that provides additional opportunities for community beautification while promoting community identity.³⁵

³³ Kathleen Rooney et al. “Community Connections Innovations Handbook,” United States Department of Transportation Federal Highway Administration, October 2018, https://www.fhwa.dot.gov/planning/community_connections/handbook/fhwahep19002.pdf.

³⁴ Minnesota Department of Transportation, “Highway Sponsorship,” 2019, <http://www.dot.state.mn.us/publicengagement/documents/workshop/2019-materials/highway-sponsorship-program-fact-sheet.pdf>.

³⁵ Minnesota Department of Transportation, “Art on Trunk Highway Right of Way,” April 27, 2020, <https://www.dot.state.mn.us/policy/operations/oe007.html>.

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