



Kestrel ESG Impact Data Scoring Criteria

ROADS, HIGHWAYS, TUNNELS AND BRIDGES

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SCOPE

This document outlines Kestrel’s evaluation criteria for the Roads, Highways, Tunnels and Bridges sector. For information on Kestrel criteria for other sectors and sub-sectors, visit kestrelesg.com/methodology.

INTRO TO KESTREL METHODOLOGY

Kestrel ESG Impact Data provides a comprehensive assessment of real risk mitigants and positive impact opportunities associated with environmental (E), social (S), and governance (transparency) (G) factors of individual municipal bonds.

Kestrel’s science-based approach to assessing environmental and social impacts has been shaped by [many primary sources](#), including studies, plans and initiatives. These sources have helped establish our analytical approach, which is centered around five overarching sustainable finance goals.

1. Transition to a decarbonized economy
2. Integrate resilient and sustainable design features
3. Preserve, enhance, or restore natural capital
4. Promote a more equitable society and a just transition
5. Disclose activities, impacts and risks

Our ESG evaluation framework is built around the concept of materiality. When we review bonds, we identify whether sector-specific operationally feasible best practices are present in bond-financed activities. The sub-sector-specific material factors we consider are a result of deep understandings we have formed from over 20 years of consulting with state and local governments on sustainable infrastructure and best practices to achieve social equity. Our methodology reflects the understanding that potential for positive environmental and social impact can vary greatly depending on the sector and sub-sector.

How We Apply Our Methodology to Produce Original Data

Whereas the market tends to assign ESG materiality at the issuer or industry level, Kestrel E and S Impact Scores reflect the presence or absence of sector-specific operationally feasible best practices in bond-financed activities. In many situations, the best practices we identify also represent real risk mitigants. The G score reflects transparency and disclosure pertaining to the bond-financed activities. Because the G score represents the availability and quality of relevant information about the bond-financed activities, it also reflects Kestrel's degree of confidence on the E score and S score.

Kestrel ESG scores are not issuer-level ratings, physical risk assessments, or surveillance of regulatory compliance. Geospatial analysis on physical risks is outside the scope of Kestrel ESG Impact Data. However, Kestrel does reveal certain factors such as sustainable and resilient building design, that mitigate real risks from climate change or natural disasters.

Data Sources

Kestrel ESG Impact Data is 100% original and independently developed. Our team of smart analysts follows sector-specific methodologies which require review of bond offering documents as well as other primary sources in the public domain. We typically review issuer and bond oversight committee websites, approved budgets and capital plans, financial statements, regulatory filings, and Electronic Municipal Market Access (EMMA) filings on the MSRB website.

INTRO TO ROADS, HIGHWAYS, TUNNELS AND BRIDGES

Kestrel defines a sector called Roads, Highways, Tunnels and Bridges. This sector encompasses diverse activities ranging from new construction or expansion of roads and highways to repaving city streets, to multimodal transport such as bike and pedestrian infrastructure. Activities also may include seismic upgrades to roads, highways, bridges and tunnels, bridge and tunnel replacements, complete streets projects or toll roads. Freight rail is in this sector. Occasionally, projects in this sector also incorporate telecommunications, stormwater infrastructure, or public transportation. In these situations, bonds are parallel-scored in multiple sub-sectors.

The US economy depends on roads, highways, tunnels and bridges to maintain the flow of goods and services. This infrastructure supports both heavy and passenger vehicle traffic and includes local, county, state and interstate facilities.

Kestrel ESG Impact Scores provide information on the sustainability characteristics of infrastructure financed with bond proceeds, and certain relevant plans or commitments of the transportation authority issuing bonds. Roads, highways, tunnels and bridges projects may include funding from local, state, or federal sources, or from a combination of these, but the source of funding does not influence Kestrel's scoring. Our scoring methodology does not vary by size or geographic location of the infrastructure projects being financed. The sources of repayment do not influence the scores.

Transportation projects take many forms, including, but not limited to, replacement or rehabilitation of aging or deficient bridges, construction of new roads and bridges, widening of existing roads and incorporation of bicycle lanes and pedestrian access. It is common for projects within the Roads, Highways, Tunnels and Bridges sector to be designed in conjunction with other projects. Examples include a major toll road leading to a bi-state toll-bridge or a highway interchange built in anticipation of a major

new industrial/commercial/residential development. On a smaller scale, a local road project may have a nexus to an urban trail system or streetlight projects may include wireless broadband. New transportation projects can be designed in accordance with sustainable infrastructure standards. Paving is a high emission activity, but maintenance of existing roads is critical to sustainability and reducing greenhouse gas (GHG) emissions from cars. Poorly maintained roads significantly reduce fuel efficiency and the useful life of vehicles.

While roads and highways are necessary to support our daily activities, this infrastructure comes at a cost to the environment and public health. According to the US Environmental Protection Agency, the transportation sector emits the most GHG emissions in the US of any sector and over 50% of these emissions come from light-duty vehicles. Exposure to emissions from cars and trucks can have negative effects on human health. Roads can have deleterious impacts on wildlife and their habitats, posing a threat to the populations of many species. Roads can also contribute to heat-island effects. Construction of major new roads can lead to sprawling development, fragmentation of habitats and loss of biodiversity. Roads, highways, tunnels and bridges directly affect vehicular and pedestrian safety, and can be designed to prioritize safety features. Projects financed today might rectify a historic transportation-related injustice, such as the construction of an interstate through a minority community, effectively disrupting neighborhood cohesion.

How We Think About Roads, Highways, Tunnels and Bridges

Sustainable Finance Goals

Environmental

- 1. Transition to a decarbonized economy
- 2. Integrate resilient and sustainable design features

Kestrel’s Environmental score reflects how well the bond-financed activities advance the first three sustainable finance goals.

For the Environmental score in the Roads, Highways, Tunnels and Bridges sector, **we place the most value on GHG-emissions reducing activities.**

We view multimodal transportation which enables alternative, efficient modes of transport as particularly impactful.

We view electric cars and the plans and infrastructure to support them as being impactful.

We view maintenance of existing roads as impactful.

We view incorporation of resilient and sustainable design features that mitigate physical risk, such as flood risk, as impactful.

We view converting streetlights to LED as impactful.

Smart-cities technologies, sometimes included in certain road and street projects, are impactful.

Sustainable Transportation Plans that are comprehensive with measurable environmental goals, quantitative performance metrics, and progress reporting are notable in this sub-sector.

Sustainable Finance Goals

Environmental *(continued)*

3. Preserve, enhance, or restore natural capital

Social

4. Promote a more equitable society and a just transition

Governance

5. Disclose activities, impacts and risks

We take a positive view of projects that incorporate features to enhance biodiversity, such as wildlife overpasses, underpasses or fish-passage improvements.

Significant, ongoing controversies which are environmental and directly related to the bond-financed activities may have a negative influence on the E score.

Kestrel's Social score reflects how well the bond-financed activities advance one sustainable finance goal: *promote a more equitable society and a just transition*.

We look for a few key factors that reflect this:

- We place value on projects that provide access or services to underserved communities or rectify historic transportation-related injustices.
- We view the replacement of at-grade railroad crossings with grade-separated crossings, such as overpasses and underpasses, as crucial in protecting public safety.
- We place value on complete streets and similar bike and pedestrian infrastructure which not only protect public safety, but also public health through reduced greenhouse gas emissions.
- We view projects that improve seismic resilience on bridges and in tunnels as being important for public safety and impactful. These activities are examples of physical risk mitigants.
- We view certain roads in certain locations as being essential to public safety when evacuation becomes necessary.
- Toll roads often place a disproportionate burden on low-income households. We take a positive view of toll relief or subsidy as a means of improving equitable access.
- Social equity plans are often meaningful in this sub-sector to ensure fair and equitable access.

Significant, ongoing controversies which are social in nature and are directly related to the bond-financed activities may have a negative influence on the S score.

Kestrel's Governance score reflects the level of transparency surrounding the bond-financed activities, impacts and risks. We utilize information in the public domain to assess this.

Criteria Table

Representative examples as per the Roads, Highways, Tunnels and Bridges methodology are provided in the table below. These are examples, and not exhaustive. *Business as Usual* indicates no alignment with sustainable finance goals, *Progressing Toward Goals* indicates there is some positive momentum toward sustainable finance goals. *Leaders* reflects exemplary best practices in the context of Kestrel’s five sustainable finance goals.

	Business as Usual	Progressing Toward Goals	Leaders
Environmental*	Proceeds used for a project that widens roadways without adding dedicated bike lanes or sidewalks.	Bond funded project includes repaving of roads and sidewalks. The improved road conditions enhance fuel efficiency.	Bond proceeds used for a roadway project that includes trails and bike paths, and aligns with a comprehensive mobility plan.
	Bond proceeds fund road construction that follows state guidelines.	Bond funded project will include retrofitting roadway with LED streetlights.	Bond funded project meets a robust sustainable infrastructure certification or standard such as <i>Envision</i> .
	Bond proceeds do not finance infrastructure to promote the use of electric vehicles (EVs).	Bond proceeds fund improvements to a roadway that is designated as an EV Corridor.	The bond funded roadway project includes installation of EV charging stations, in alignment with an EV Infrastructure Plan.
Social*	No publicly available information evidencing support for underserved communities.	An equity assessment informs project prioritization in capital plans.	Bond proceeds will be spent on road maintenance in an area that is identified in planning documents as underserved.
	Bond proceeds fund a road that is not classified as a coastal evacuation route.	A portion of bond proceeds will fund improvements to a coastal evacuation route.	All bond proceeds used to improve safety by expanding or improving a coastal evacuation route.
	Street projects do not include multimodal improvements.	A portion of bond proceeds will be used to construct sidewalks for pedestrian safety.	Bond proceeds will be used solely to enhance or construct bike lanes and multi-use paths.
Governance*	Limited disclosure is provided in the bond offering document or the issuer/obligor’s website.	General details are available regarding uses of proceeds and associated projects.	Projects are well defined with clearly delineated budgets.

*There may be attributes that negatively impact the score.

Relative Weighting of Environmental and Social Impacts

Because the primary opportunity for positive impact in the Roads, Highways, Tunnels and Bridges sector is related to the environment, the E score is weighted more heavily.

Negative Influences on ESG Scores

Controversies must be significant and directly relate to bond-financed activities, or in limited cases, relate to the issuer. Examples would include bond proceeds used to fund roadway expansions that negatively impact endangered species habitat or road projects that reduce cohesion within rural communities.

Green or Social Designation Eligibility

Typically, bonds in this sector do not meet ICMA Green or Social Bond Principles eligibility criteria which require that 100% of proceeds go to eligible activities.

- Green: 100% of bond proceeds go to ICMA Green Bond eligible activities. Examples include non-fossil fuel transportation such as bike paths, trails, sidewalks, or electric freight rail.
- Social: 100% of bond proceeds go to ICMA Social Bond eligible activities.
- Sustainability: 100% of proceeds go to ICMA Green and Social eligible activities.

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About

Kestrel provides ESG Impact Data and verification services designed to bring greater transparency and insight to fixed income, helping to set the market standard for sustainable finance.

We are a team of environmental and social scientists, engineers, and finance professionals with deep, nuanced understandings of how state and local governments finance and deliver public projects. We understand the complex activities and infrastructure financed with municipal bonds and provide meaningful, material insights on their ESG characteristics with our innovative data offering.

We are also a leading provider of external reviews for green, social and sustainability bond transactions in US public finance, consistently garnering over 60% of the market share by par and by number of reviews. We are qualified to evaluate corporate and municipal bonds in all asset classes worldwide for conformance with international green and social bond standards.

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