INFRASTRUCTURE

Why engineering consultants switch to Autodesk.

Four advantages of leaving legacy infrastructure software behind.

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Introduction

Legacy infrastructure software is holding engineering firms back

Infrastructure projects generate more data than ever, but too much of it remains fragmented, unstructured, and difficult to put to work. As project complexity, climate-related risks, and owner expectations rise, engineering service providers need a better way to turn that information into insight: connecting people, data, and workflows across planning, design, construction, and operations. This connected approach helps teams coordinate everything from roadway geometry and structural design to drainage and stormwater management.

These firms aren't just looking for a new design tool. They're looking for a better way to connect people, data, and workflows, across the entire asset lifecycle.

That's why they're switching to Autodesk.



"Our primary focus is to design transportation structures that we can proudly pass on to future generations. Such projects are no longer viable without implementing BIM processes."

SINAN ALEMDAR
Board Member and EVP, EMAY Engineering

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01

Bring multidisciplinary teams together from planning through operations

Modern, resilient infrastructure depends on connected workflows. Owners, engineers, contractors, operators, and maintenance teams all need access to the same trusted information throughout the asset lifecycle. For transportation projects, this means connecting roadway, civil, and drainage design teams so stormwater infrastructure is considered alongside other critical design decisions, rather than in isolated workflows.

Autodesk's open, interoperable platform connects every stakeholder through a common data environment (CDE), creating a shared foundation for planning, design, construction, operations, and long-term asset management.

81% of transportation leaders say that interoperability improves project outcomes

83% believe improved data interoperability would enhance collaboration

82% agree that better access to data contributes directly to more resilient infrastructure





Key benefits:

- Improve coordination across every project phase
- Connect owners, engineers, contractors, and operators
- Reduce silos with a single source of truth
- Support better handover into operations

> “Siloed data is a big issue. Each department has valuable data, but I don’t think it’s utilized well. By appropriately combining these data, we can enhance our productivity.”
>
> **TETSUHIRO KURAHASHI**
> BIM manager at Nippon Koei

02

Connect data across every phase of the infrastructure lifecycle

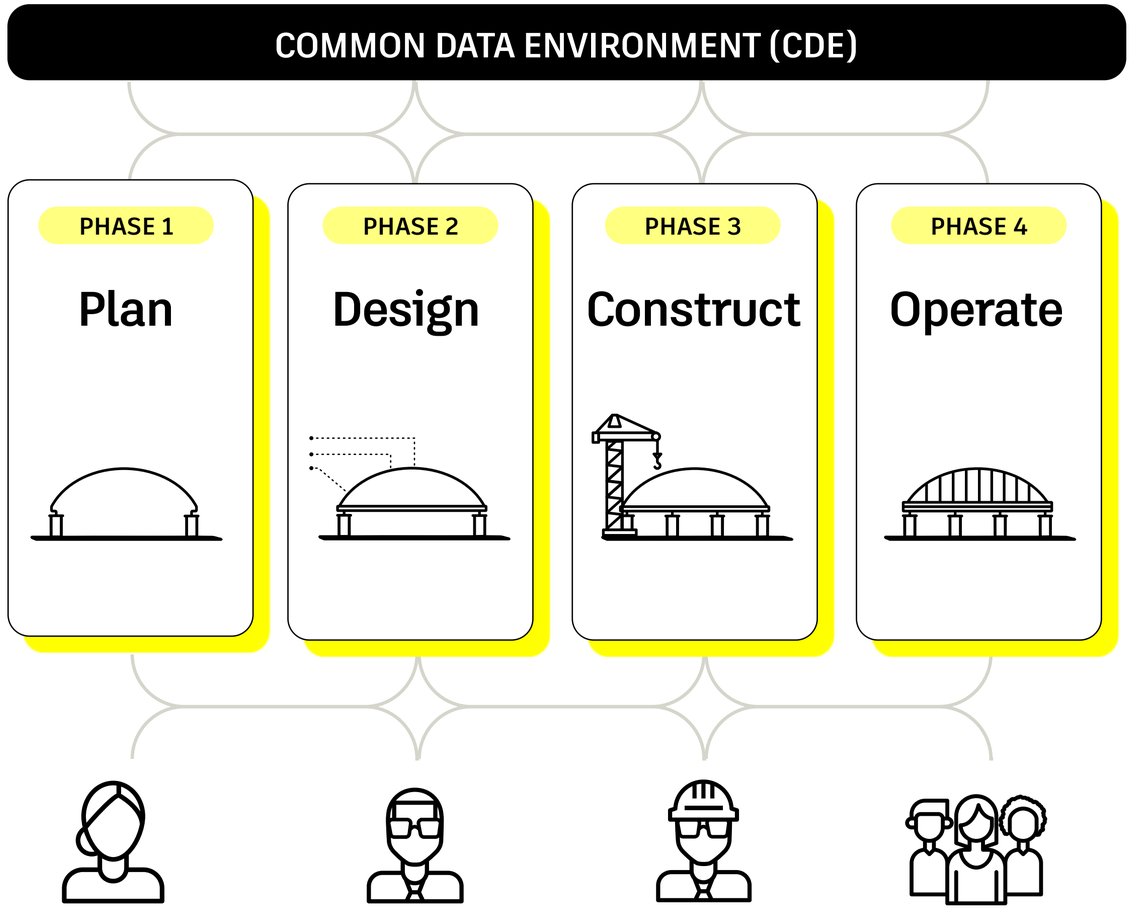
Infrastructure projects rely on information from many different systems, but that information is often trapped in disconnected applications and formats; especially with legacy solutions.

Autodesk's open, interoperable platform allows data to flow seamlessly across planning, design, construction, and operations.

Instead of manually moving data between systems, engineering firms can connect people, information, and workflows in their common data environment (CDE), creating a single source of truth throughout the entire asset lifecycle.

With Autodesk, engineering firms can:

- Connect BIM, GIS, drainage analysis, and project data in one interoperable ecosystem
- Reduce manual data transfers and duplicate information
- Improve collaboration across all project teams
- Support a connected digital thread from planning through operations and maintenance



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50%+

of transportation leaders have had project rework because of poor interoperability

84%

of transportation leaders say poor data management impacts their project delivery

96%

of all data goes unused in engineering and construction and 90% of that is unstructured*

"There are always varying levels of digital maturity among agencies, contractors, and consultants. When those gaps exist, they often lead to fragmented workflows, data gaps, and ultimately rework on projects."

JAY MEZHER
Digital Delivery Practice Lead,
Mott MacDonald

03

Make better decisions today, and build for what's next

The decisions made today shape the infrastructure communities will depend on for decades. But with growing volumes of project data spread across teams, tools, and systems, making informed decisions—and preserving that information for the future—is increasingly difficult.

By connecting people, workflows, and data in a cloud-first, open, interoperable platform, Autodesk gives engineering firms and their project partners access to trusted information throughout the project lifecycle. Firms can identify risks earlier, automate manual processes, and make faster, more informed decisions while creating a digital foundation that can evolve with changing owner requirements and technologies. For example, evaluating stormwater runoff and drainage performance earlier in design can help teams identify potential flooding risks and make more informed infrastructure design decisions before construction begins.

The result is better decisions today and infrastructure that is more resilient, adaptable, and ready for what comes next.

Autodesk enables firms to:

- Identify risks earlier and reduce costly rework
- Make faster, more informed decisions with connected, trusted data
- Standardize workflows and automate repetitive processes
- Connect BIM, GIS, and other technologies in an open ecosystem
- Scale digital project delivery as owner requirements and technologies evolve
- Deliver infrastructure designed for long-term performance and maintainability





78%

of transportation leaders say collaboration improves outcomes

61%

report time savings from better collaboration

59%

report improved project quality

"Everybody should be looking at the same data. People can work in different tools, as long as the information itself is consistent and trustworthy."

AMANDA COLEMAN
Engineering Innovation & Digital Center Manager, Port of Portland

04

Turn project data into lasting value for owners

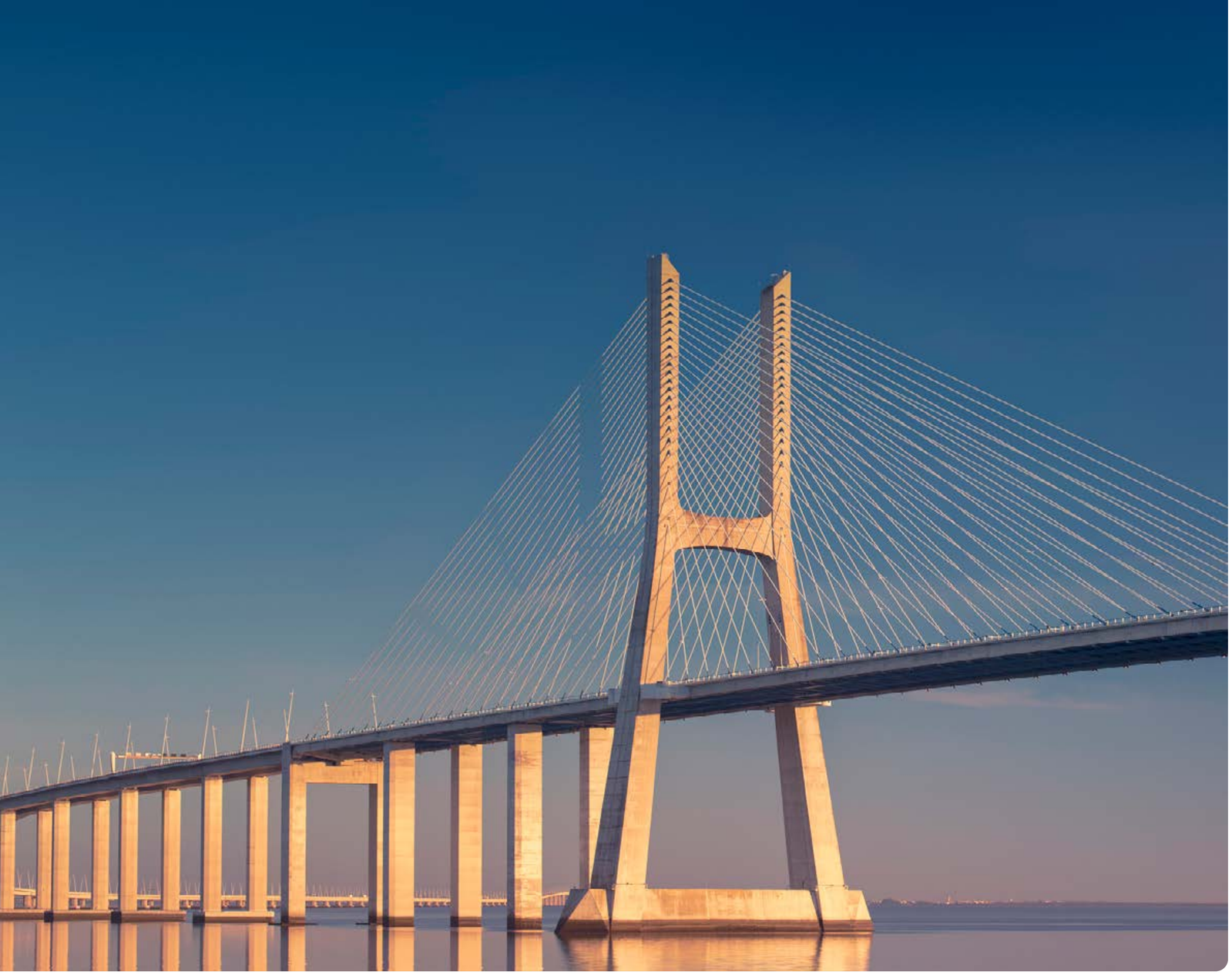
Engineering firms create enormous amounts of valuable data throughout planning, design, and construction. But at project handover, that information can be fragmented across files, formats, and systems, leaving infrastructure owners with data that is difficult to access, understand, and use to operate their assets.

Autodesk helps engineering firms deliver more than a completed project. By connecting and structuring project information across an open ecosystem, firms can provide owners with a digital representation (digital twin) of the asset that carries trusted project data forward into operations and maintenance

This creates an opportunity for engineering firms to become longer-term digital partners to their owner clients, helping them establish the data foundation for digital twins and giving operations teams better access to the information they need to manage, maintain, and improve their assets over time.

- Structure and connect project data so it remains usable beyond design and construction
- Deliver richer digital handovers instead of disconnected files and documents
- Provide owners with a trusted data foundation for digital twins
- Connect BIM, GIS, drainage analysis, and other asset information across an open ecosystem
- Preserve drainage and stormwater data to support long-term operations and resilience of transportation infrastructure
- Help operations and maintenance teams access the information they need throughout the asset lifecycle
- Extend their value to owner clients beyond traditional project delivery





84% of transportation leaders say poor data management impacts project efficiency

79% agree AI accelerates solving tough engineering problems by making workflows more efficient

71% have implemented, or will implement, cloud-based workflows

"We are stewards of data...
Our role is to understand what data is important... and make it available to the rest of the organization."

AMANDA COLEMAN
Engineering Innovation & Digital Center Manager, Port of Portland

Switch to the future of transportation infrastructure

The future of infrastructure won't be built on disconnected, legacy software.

Leading engineering firms are switching to Autodesk to connect teams, unify data, and deliver infrastructure that performs better, from planning and design through operations and long-term maintenance.

Switching to Autodesk means gaining:

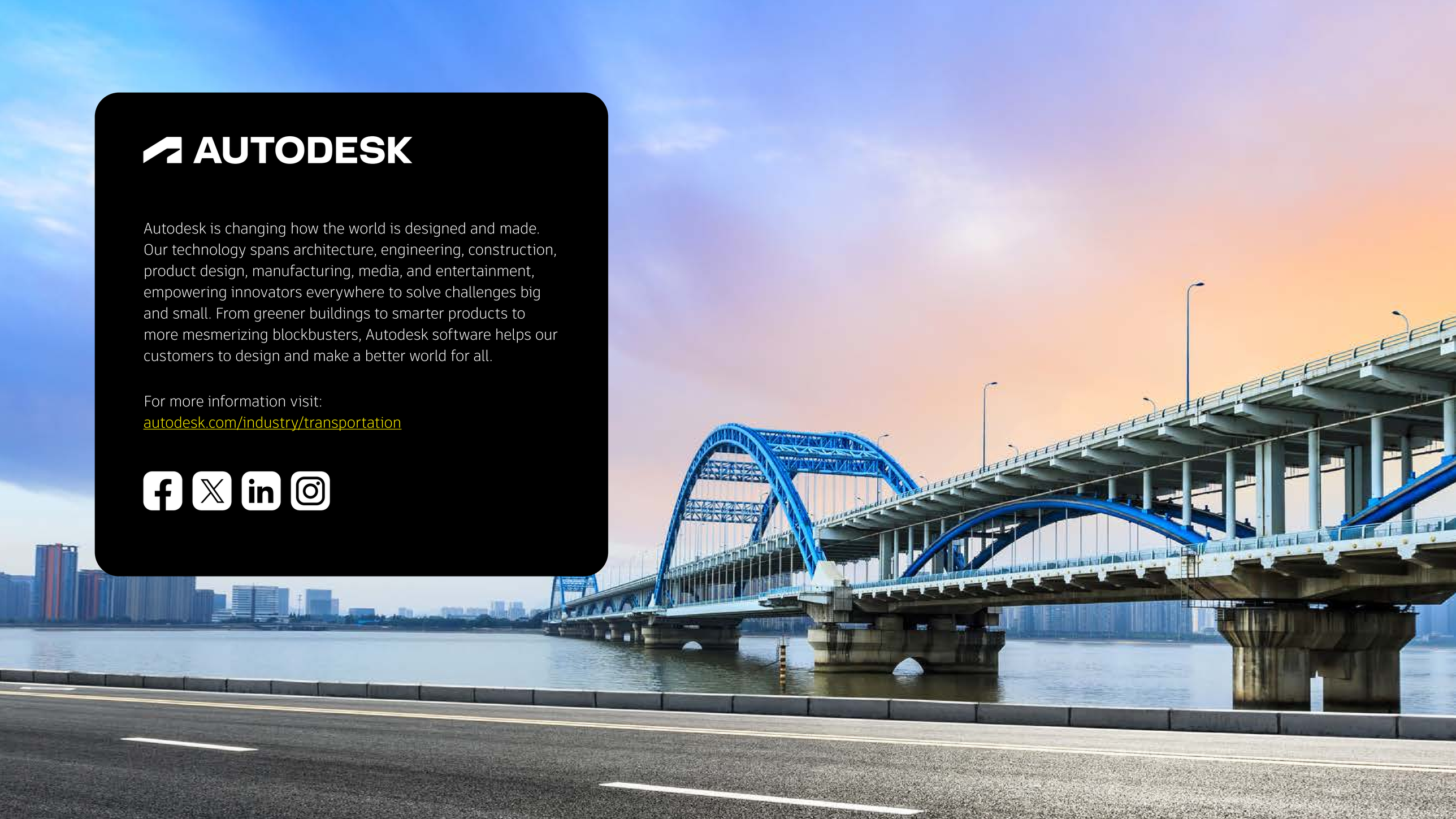
- Connected teams
- Connected data
- Better decisions across the asset lifecycle
- A scalable foundation for digital project delivery

Ready to switch to Autodesk? →



Data sources: *All data is quoted from Autodesk's State of Design & Make: Spotlight on Transportation report, 2026, except *FMI Report - Big Data = Big Questions for the Engineering and Construction Industry*

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Autodesk is changing how the world is designed and made. Our technology spans architecture, engineering, construction, product design, manufacturing, media, and entertainment, empowering innovators everywhere to solve challenges big and small. From greener buildings to smarter products to more mesmerizing blockbusters, Autodesk software helps our customers to design and make a better world for all.

For more information visit:
autodesk.com/industry/transportation