Start solving tomorrow's transportation challenges

What will be your legacy?

AUTODESK

Let’s think about this in a new way

Older tools

While agencies use trusted tools for design, planning, and collaboration, the private and public sectors are exploring the new world of digital interactions. With the challenges that come with providing more services with less money, as well as the demand for more insight into and greater accountability responses for more sustainable infrastructure, it's clear that Departments of Transportation need to interact with them in smarter, more modern ways.

Retiring leaders

Today's transportation leaders are likely to retire before this change has been addressed. So, transforming the way the agency interacts will fall on the shoulders of their subordinates. Some will become leaders; some will become advisors. All of them must prepare for greater public scrutiny and tools that deliver faster, more effective ways of working.

Greater accountability

Current leaders need to focus on forces already in motion today. That means asking questions such as:

- How can we create more sustainable and resilient infrastructure to better plan for the future?
- How can my agency continue to serve more people for less money after I leave?

Future leaders

Future leaders need to look to the challenges of tomorrow. That means asking questions such as:

- What tools will the public and our partners expect us to use?
- How can we begin using them or use them better if we already own them?
- How can we attract, recruit, and retain the right people?

Fortunately, Autodesk can help you start to answer these questions.

Sustainable & resilient infrastructure is required

Nearly all agencies, especially those providing AEC services, experience the effects of extreme weather events. But more of these events now occur more frequently, in more places, and at unexpected times.

Events related to climate change and natural disasters may not have the same causes, but they need the same responses. They create unforeseen stresses on infrastructure, first responders, and agencies that provide input and data for emergency planning. And as situations change faster than ever, plans, tools, and budgets must be updated.

The public questions responses at every level of government.

Traditional ideas about how to design and protect infrastructure are being questioned. Methods of alerting and protecting the public are seen as being too little, too late. And the public is reconsidering once-taboo ideas like controlled burns.

Even as the need for future-centric vision and services soars, politics and the 2020 census results could move federal funds away from jurisdictions that need it most.

Climate change is “likely to fuel competition for resources, economic distress, and social discontent through 2019 and beyond.”

How can agency leaders **mitigate risk**, **contain costs**, and **maintain public confidence?**

Leaders need to understand how private partners and the public will likely operate, identify which tools they'll use (and expect public agencies to use), and find new ways to collaborate with them.

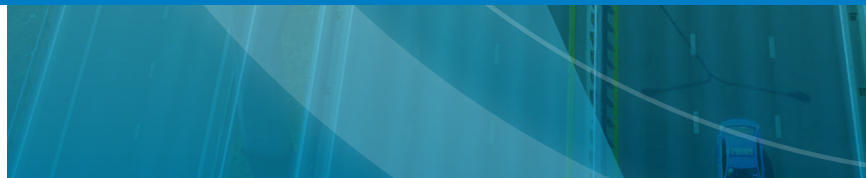
They also need the ability to create digital twins that model how extreme weather might affect their assets to:

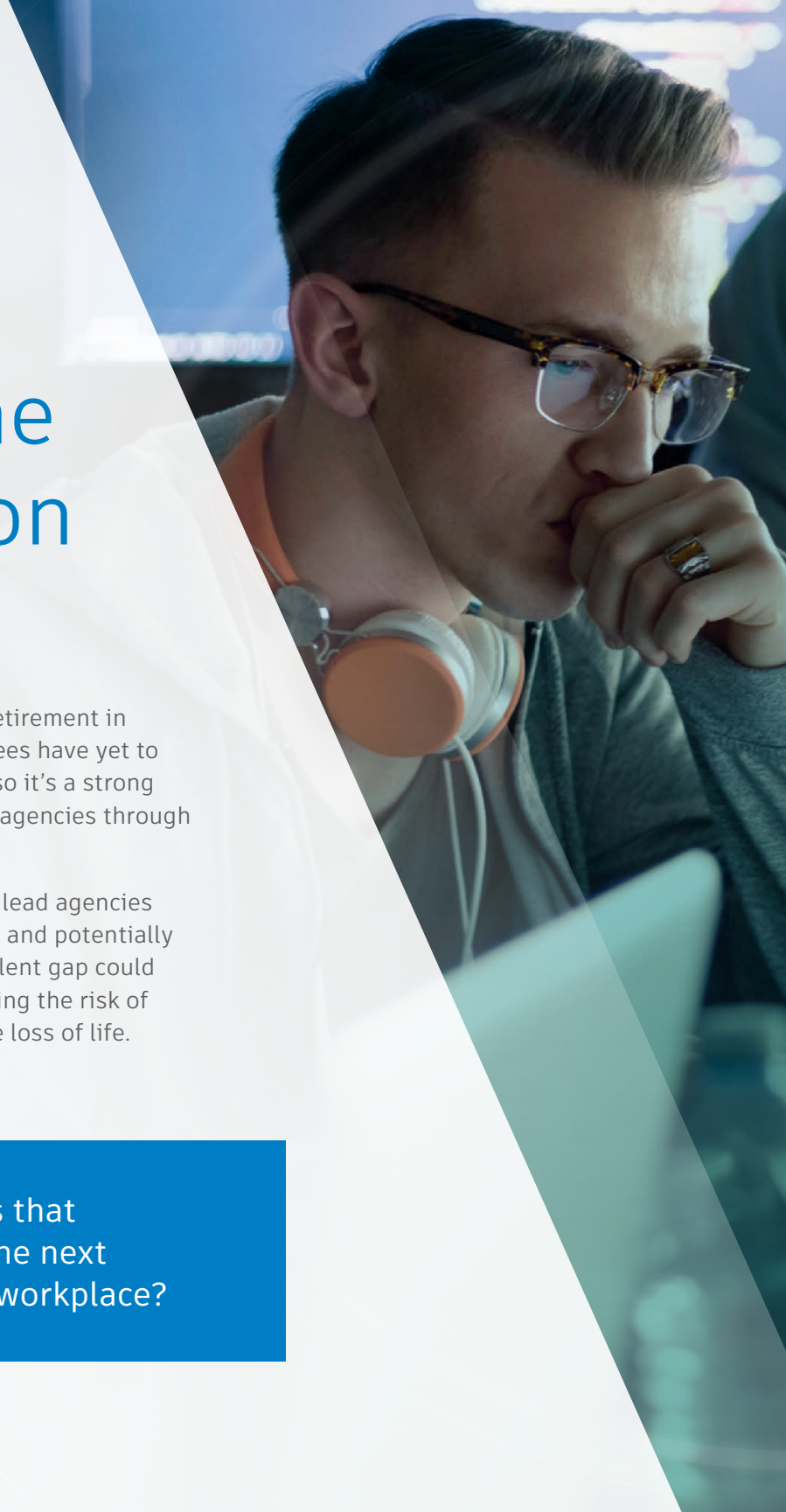
- Reduce loss of life, property destruction, and loss of infrastructure function
- Protect infrastructure and avoid failures
- Plan more effective responses
- Plan budgets more strategically

Agencies need to collect, prepare, integrate, and use data more effectively to:

- Upgrade infrastructure to withstand extreme weather events
- Upgrade procedures to address extreme weather events
- Eliminate project overruns by reducing the errors and omissions that cause them
- Adapt to a more remote and dispersed workforce by adopting cloud technologies

Agency leaders must be able to share data-based plans and explain the decisions that led to them.



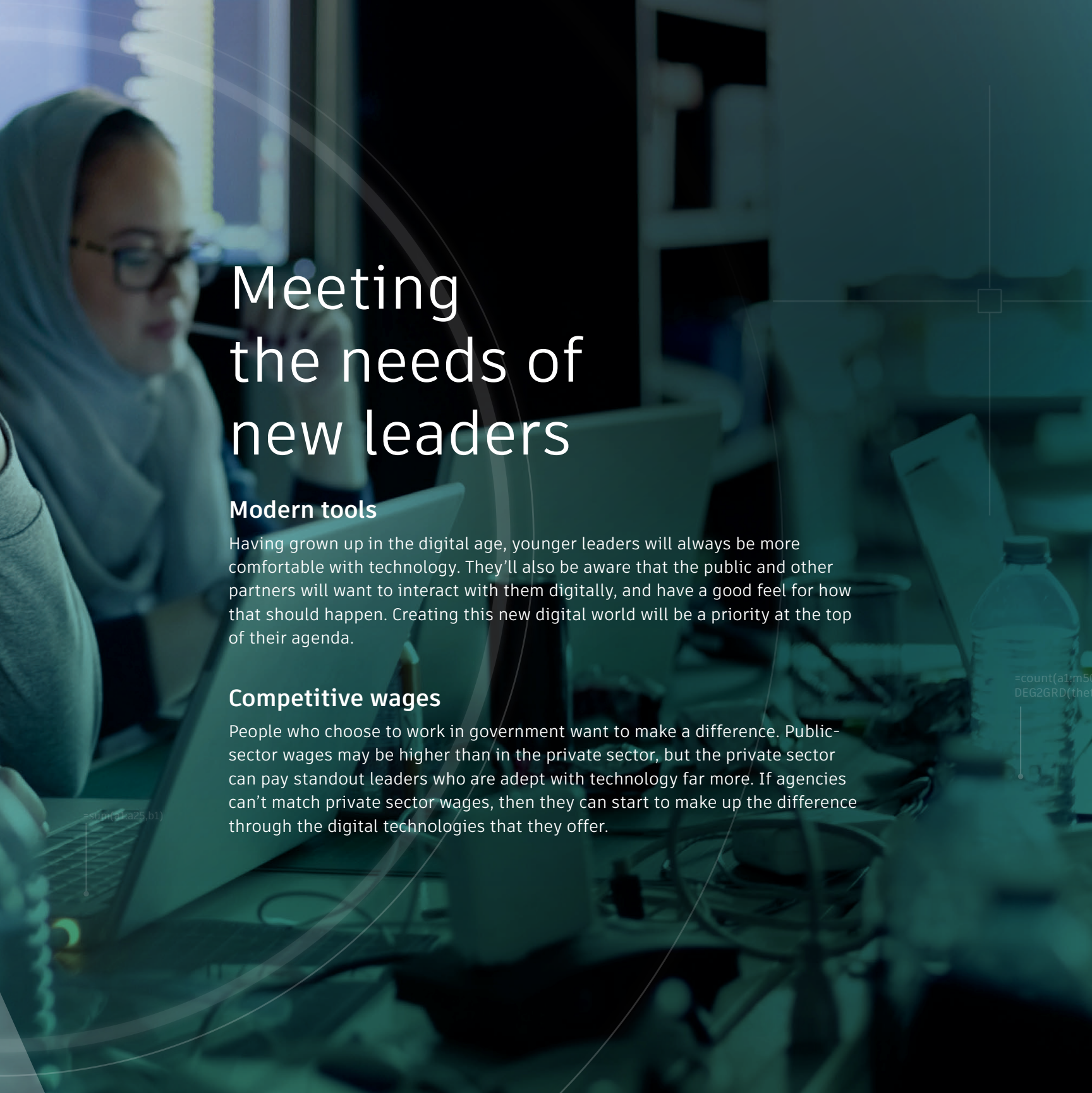


Who will be the next generation of leaders?

Today's more seasoned leaders are heading into retirement in droves—as many as 10,000 a day. Younger employees have yet to gain the experience required to take their places, so it's a strong possibility that today's middle managers will lead agencies through their digital transformation.

As leaders retire, having fewer people qualified to lead agencies and departments will have impact on performance and potentially lower the quality of services being offered. This talent gap could have serious ramifications for an agency - increasing the risk of damage to infrastructure and even resulting in the loss of life.

Agencies face significant challenges that will only grow tougher. What does the next generation of leaders expect in the workplace?



Meeting the needs of new leaders

Modern tools

Having grown up in the digital age, younger leaders will always be more comfortable with technology. They'll also be aware that the public and other partners will want to interact with them digitally, and have a good feel for how that should happen. Creating this new digital world will be a priority at the top of their agenda.

Competitive wages

People who choose to work in government want to make a difference. Public-sector wages may be higher than in the private sector, but the private sector can pay standout leaders who are adept with technology far more. If agencies can't match private sector wages, then they can start to make up the difference through the digital technologies that they offer.

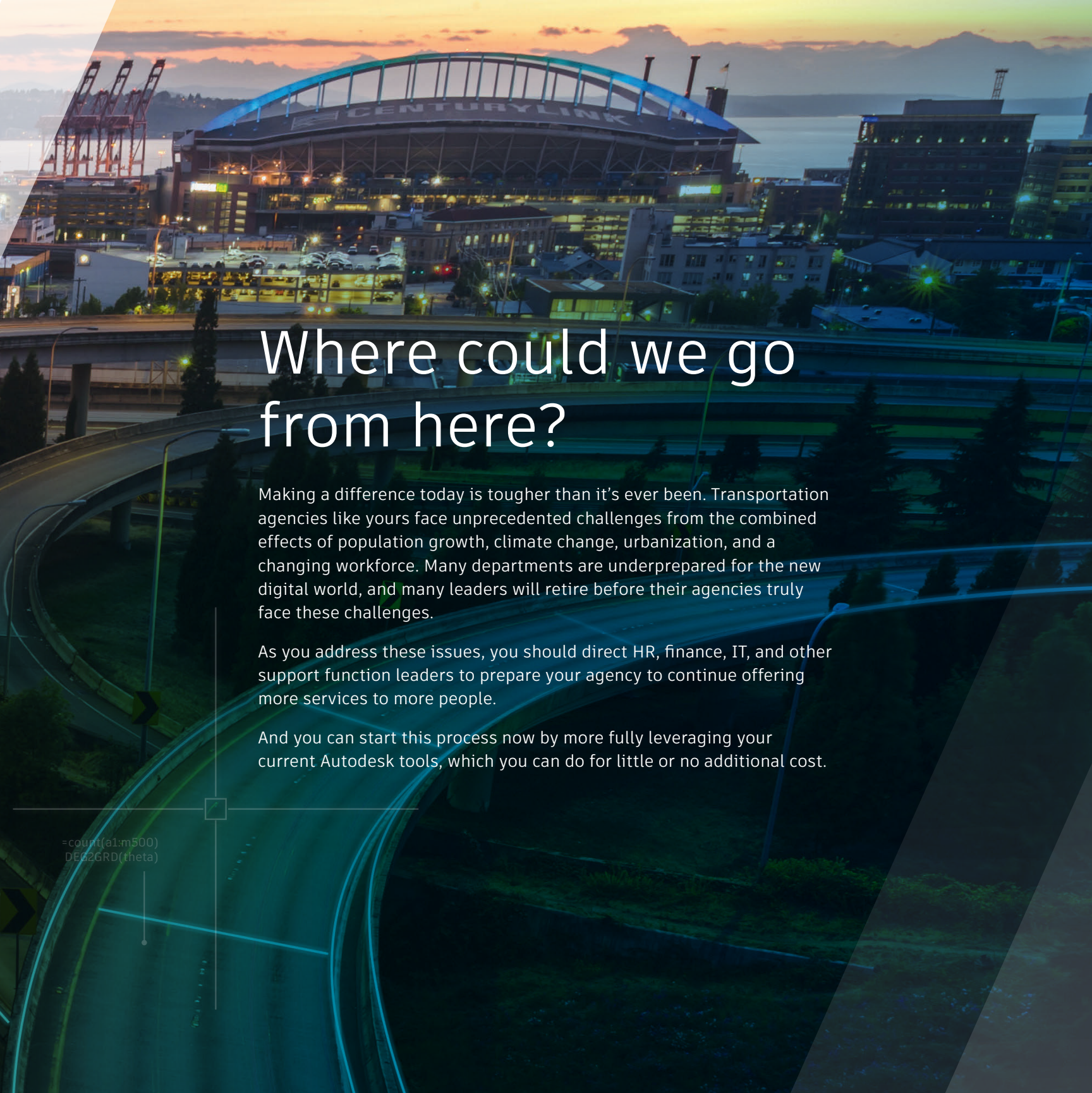
How you can make positive steps forward

Start by creating a vision for your agency's next 5-15 years, then direct leaders in HR, finance, IT, and other supporting functions to identify leaders who can execute that vision. That means thinking about:

- The challenges that incoming leaders might face
- The training needed to meet those challenges
- The approach you take to finding these people

What's more, you should devote significant attention to determining:

- What tools the ideal hire will already be trained to use
- How those tools will affect interactions with private and public partners
- How private partners and the public expect agencies to interact with them
- How to implement those tools



Where could we go from here?

Making a difference today is tougher than it's ever been. Transportation agencies like yours face unprecedented challenges from the combined effects of population growth, climate change, urbanization, and a changing workforce. Many departments are underprepared for the new digital world, and many leaders will retire before their agencies truly face these challenges.

As you address these issues, you should direct HR, finance, IT, and other support function leaders to prepare your agency to continue offering more services to more people.

And you can start this process now by more fully leveraging your current Autodesk tools, which you can do for little or no additional cost.

At Autodesk, we‘re thinking about Departments of Transportation in a new way

We realize that you face a lot of new challenges: the combined effects of climate change on infrastructure, a changing workforce, and how growing public expectations affect your daily life. All of these things will make it harder to deliver services and control costs in the future.

We hope that the ideas we’ve shared here can help you continue to serve the people who depend on you.

We’d love to talk more about how Autodesk can help you meet these challenges.

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