



"It would be very nice if the tech bros could come in and ask in a collaborative fashion for permission rather than after-the-fact forgiveness."

Aaron Peskin, co-writer of San Francisco's eScooter permit bill, speaking to Wired

"The vision of city collaboration resonates loudly with HERE ... we see the need for a neutral player – somewhere companies and governments can go to decide how they want to share their data.

Such a vast amount of data is being collected by different organizations and governments, yet only by combining these different sources of data can you really create context. Context is what you need to address the use cases necessary to create a smarter city."



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The world's leading location platform: helping people and goods move more smoothly and safely for over 30 years.

Is it for me?

If you're interested in bringing organizations together for better urban mobility, then yes:

- City mayors, policymakers, planners, architects, CTOs, CPOs, COOs
- Mobility company CEOs, CTOs, CDOs, CPOs, COOs, partner relations
- Mobility consultants and analysts
- · Research students
- · City residents

It will help you learn:

- Why open collaboration is key
- How to create the open environment needed
- · How an open approach has furthered innovation in other cities
- How the Open Location Platform from HERE can help your urban mobility plans
- · How you can collaborate with HERE for better urban mobility

What's inside?

Cities and new mobility companies are starting to unite, not fight, for more harmony on our streets. But to truly help citizens, both parties must let down their guard and work together with full transparency.

So how can you best open up, while maintaining your values, vision, privacy... and sanity?

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Why collaborate?

The wolf at your door? Or an unexpected benefactor? If you're still skeptical about city authorities and companies getting too close, it may be time to open your mind.



As we know from the natural world, in life, collaboration is key. Small fish hunted by large predators know that by moving together, with an awareness of those around them, they stand more chance of survival. Humans are no different. Connection is built into our DNA.

But – as humans tend to do – we often choose to ignore this inner call. We get caught up in our own worlds, in our own office cubicles, trying to do the right thing in our self-made silos. To do this, is to swim against your instinct, and leave yourself open to problems.

Better together - if done right

In the urban mobility space, <u>collaboration is becoming</u> <u>increasingly important</u>. Cities are realizing that urban areas need multiple forms of transport in the mix – and citizens are now demanding them. And in offices across town, mobility companies are realizing that the city is the holder of the keys to the curbside, and they're better kept close.

But there's still a large gap between the ideal and the reality. Yes, there are shining examples of city-company collaborations producing great innovations (we've highlighted five in this guide), but there need to be many more to address the pressing challenge of congestion.

What's more, many organizations aren't collaborating in the right way, with disparate IT infrastructures causing costly inefficiencies and barriers to innovation. Also, slow or even closed lines of communication are leading to confusion and frustration, and taking the momentum out of otherwise promising projects. Not to mention the traditional wariness both parties often have about each other which can block projects before they even begin.

"Companies may come in before the permit process is formalized ... [or] undermine city authorities by passing laws at the state level. Cities must keep their authority over their streets."

Nicole Payne, National Association of City Transportation Officials (NACTO), San Francisco

Divided we come to a standstill...

Uber is a company that has learned about the need for collaboration. It was famously banned in countries like Hungary and Bulgaria, and some services have been banned in cities across Europe. According to Forbes: largely because: "regulators are often the main roadblock."

Most recently, silent swarms of eScooters swooped into city streets almost overnight. Their failure to work with authorities has caused outright bans all across the US, as cities flex their regulatory muscles. As the Guardian reported: "The early 'arrive first, ask later' tactics of scooter companies had perhaps riled cities, and they wanted to show they were in charge."

And in this power struggle, everyone loses. When companies fail to build open relationships with cities, and the city takes a hardline approach, it's bad news for jobs, tourism, investors, innovation – and for the mobility of the very city that shot it down.



...united we flow

On the other hand, you can do many exciting things if you work together. For example, autonomous electric vehicles (EVs) and digital signage can create a flexible infrastructure for smooth traffic flow – as long as there's seamless sharing of real-time data.

And if authorities help to map out charging stations, and facilitate seamless payments, mobility customers will enjoy a far better experience, and will be more likely to use EVs. For this, according to the Guardian: "a collaboration between public and private sectors is required to mitigate common concerns."

In fact, Uber is proof of this. It's now working hard to turn things around, starting with Germany. The new chief executive, Dara Khosrowshahi, visited the country twice to apologize, opened an office where people could come and speak to employees, and promised to follow regulations – and even said it would add electric cars. And it worked. According to The New York Times, Rainer Matheisen, a member of the City Council at the time said: "I was very skeptical because of what they did do in the past, but I was surprised by the new way of communicating with us."

So, as eScooters, eBikes and even pogo sticks continue to flood our urban areas, we need to climb out of our silos and face facts. The only way for all parties and vehicles to rein in the chaos, for the good of the citizens, is to move forward together, being respectful and aware of the neighbors around us.

"Solving the mobility challenge will require bold, coordinated actions from the private and public sectors."

Urban mobility at a tipping point, McKinsey & Company.

Let the "the other side" in and...

...your city can...

- Improve traffic flow with real-time insights. There are many examples of how sharing real-time data with companies will help your city run more smoothly. One is that you can share live information about big events coming up, like marathons or concerts, and mobility companies can position vehicles in the right places (the end of the race/beside a stadium entrance).
- **Increase safety.** You can better understand the vehicles mobility companies use, and the potential risks, and regulate for those. And with better mobility comes less stress, and happier people going to sporting events, who are less likely to become aggressive.
- **Boost its reputation.** Value to citizens comes first, but the way a city is viewed can also help to attract investment, in the form of new residents and tourists. By showing you're innovating, you can work towards becoming the "Copenhagen" of cities with the added bonus that you may spend less time responding to complaints, and improve team morale.
- **Innovate faster.** <u>Truly open cities</u> are creating a data platform that anyone can access. This enables mobility companies and developers to come up with their own ideas to build on top of that. For example, a developer in New York can overlay city construction plans with maps and historical traffic data to route people better during building hours.
- **Better learn and adapt.** With shared data, you can assess how a city is actually used vs the way it was created. And make changes accordingly.
- **Become more agile.** City authorities often aren't as fast as the private sector to embrace change. You can learn from innovative mobility companies and incorporate some of their ways of working into your own organization.
- **Have more fun.** Often overlooked is the sense of fun that new mobility companies bring to a city. Have you ever seen anyone whizzing by on an eScooter without a smile on their face?

...your business can...

- **Sell new ideas.** If you've built a platform of trust with a city, you can build on that. When you come to them with a new initiative, they're more likely to believe that you're interested in enhancing the system, not breaking it to earn a few bucks.
- **Delight customers.** City authorities are sitting on a lot of data about the movement of citizens, which, if shared with you, can help you create a better customer experience. If the city moves to real-time location information, then all the better.
- **Access curb space.** When you work well with both cities and other mobility companies, sharing curb space is easier, and more harmonic.
- **Prepare for legislation.** You can create a better product for citizens if you're allowed to take a seat at the public sector table. Through open conversation, you can better plan for upcoming regulations, and benefit from having an ally to help you respond to existing ones.
- **Boost morale.** Remember your office is full of people who live and commute in in the city you're operating in. You're giving them a chance to impact, and improve, their own lives.

Want to talk? We do, too. Get in touch here.



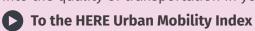
What are the roadblocks?

Breaking new ground is rewarding, but not always easy. Here's how to avoid the potential pitfalls:

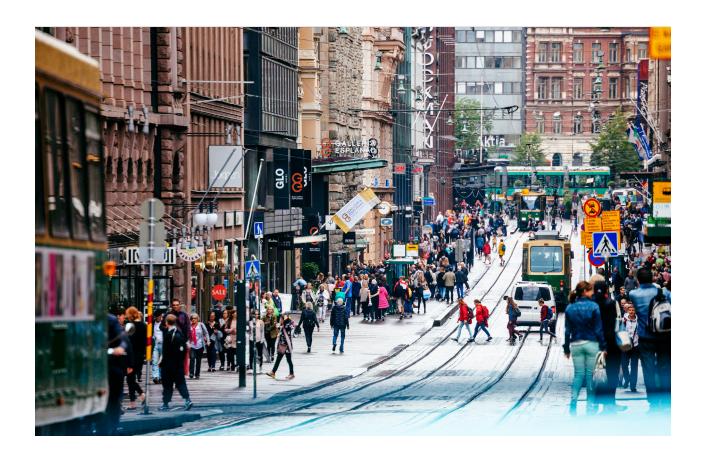
What could go wrong?	What can you do?
Legal issues. Regulations restricting vehicles, parking and data sharing.	Avoid breaking the law – and incurring heavy fines, as well as alienating city officials – by developing business models that respect the city and its regulations.
Limited cashflow. Cities have to prove value for money, and sometimes urgent, unforeseen tasks suddenly get preference.	Test a concept first, so at least you have a sample use case. Also, don't rely too much on just one project.
Disjointed teams. Organizations (especially public ones) often work in silos, unaware of the big picture, concerned only about their own goals.	Lead the way by sharing information and being transparent.
Delayed benefits. Public sector officials often want to realize value quickly, whereas mobility companies may not expect returns for a few years.	Again, test first, using regional rather than national support programs, so you can accelerate results.
Data privacy. Cities are being encouraged to share data, but also have a responsibility to protect it.	Choose trusted suppliers, focused on keeping personal data secure. Also, instead of simply taking data, offer citizens rewards (like discounted services) in return. And communicate the benefits of doing so. For more, see: "The Value of Urban Data," by the Morgenstadt initiative.

How mobile is your city?

We created an Urban Mobility Index to show you how our data helps you gain insights into the quality of transportation in your city. Did your city make the top 35?



A three-part guide to creating a more open platform, for more harmonic urban mobility.



"Urban mobility companies must collaborate closely with policymakers, decision makers and industry leaders to integrate these new mobility options into existing transport infrastructures."

"Cities must embrace innovative mobility solutions and consider how they can better work alongside companies to create spaces that are clean, safe and sustainable, and in which residents can travel without congestion or pollution."

Jaanaki Momaya, UK General Manager, Lime (Source)

Want to talk? We do, too. Get in touch here.

#1: Trust

They'll do the right thing (if you let them).



In a recent TEDx talk, <u>CEO</u> and Young Global Leader 2017, <u>Insa Klasing</u>, talked about the art of letting go. She told the story of how a horse accident forced her out of the workplace for several months. This stopped her controlling every aspect of her team's work – and, to her surprise, "they didn't fail, they thrived."

For her, it was about trust. Once you put aside your wish to control, and show people you trust them to do a good job, they'll feel able to do just that. Lee Balcaen, HERE Senior Director, agrees: "I'm very good at putting myself out of a job. I build teams that can work efficiently on their own, and then my work is done, and I can put my energies into developing a new team."

Look at startups like Airbnb, DriveNow and the very car-sharing companies that line your city's streets. All built on trust. Who would have thought 10 years ago that we would trust strangers enough to give them our house keys? And yet, we do.

Sure, things can go wrong, and occasionally they do go wrong. But there are a thousand more examples of how trust, and believing in the skills and decency of other people, is transforming the way we live.

The psychology of collaboration

Forget business goals for a minute. Here's how you can personally be a good collaborator:

- 1. Earn trust (prove you can do what you say)
- 2. Give trust (give away control, share information, believe in others)
- 3. Accept failures (they will happen, learn from them)
- 4. Plan together (for a shared future)
- 5. Be optimistic (believe your vision can be reality)

Source: positivepsychology.com

#1: Trust

What does this mean in practice?

- Change your mindset. City authorities are sometimes suspicious of companies, believing them to care only about profit, and not people. Likewise, mobility companies sometimes feel that cities are more likely to block than to take a risk. But often (as in the eScooter example) this is because of the human emotions. Frustration caused by lack of trust and communication. Take the advice of Aaron Peskin, quoted on the second page of this guide, and ask first: you never know what the answer will be. Believe in people, and they'll believe in themselves.
- Share data. Information sharing is critical to harmonizing urban mobility. Both parties are sitting on huge amounts of knowledge about how people and things move or want to move. Only by combining this information can they get a full picture of what's going on. Of course privacy and data protection is a concern, but these days any respectable company will have that at the core of their solutions. Being able to evaluate road-user data can make traffic control systems more intelligent.
- Understand (and share) your visions. Work together to understand each other's challenges and needs, and find some common ground so you feel you're all working towards creating the same version of the future.
- Make "openness" one of your values. Easier for a company to do, yes. Company culture comes from the top. Both startups and large companies need to put openness at the heart of their business. You may have concerns about privacy and security, but these can be overcome with the right infrastructure. It's all part of trusting: in people and in technology.
- Create a public policy department. The regulatory environment is so important today, that major transportation firms and startups are creating large public policy departments. These can include former lobbyists, regulators, lawyers, public-relations experts and economists.

"I build teams that can work efficiently on their own, and then my work is done, and I can move on."

Leen Balcaen, Senior Director, Industry Solutions, HERE

#2: Tech

A secure foundation for sharing.





New mobility companies: how social are you?

When applying for a license, proving your value to the city shouldn't be a marketing exercise. Cities can easily spot a profit-first approach hiding behind clever copy, so make sure you:

- Put people first, always
- Find ways to enhance safety, speed, tourism and even citizens' love for their city, as well as turn a profit
- Build this into your core, from the beginning

And don't underestimate the positive effect this will have on your team, with an increasingly philanthropic workforce now prioritizing social issues over money.

"64% of millennials said that they wouldn't take a job at a company that wasn't socially responsible"

2016 Cone Communications

Millennial Employee

Engagement Study

Trust alone doesn't make a city smart. To share information quickly and seamlessly, a secure and easily accessible technical infrastructure key.

We've seen how sharing data is essential for good collaboration, but to make this work, it's time to look at your technology. Both city authorities and companies need to put the right foundations in place, and think about what data they want to collect and share.

Janette Sadik-Khan, NACTO Chair and Principal at Bloomberg Associates <u>says</u>: "Transportation today relies on digital infrastructure as much as on the physical infrastructure of streets, and as our travel histories move online, our digital security has become as important as traffic safety."

This is US focused, but Managing Mobility Data from NACTO is an excellent introduction to how to handle the huge volumes of data cities are now expected to process. It discusses the type of data you'll be dealing with, and the principles for managing it (public good, protected, purposeful and portable).

#2: Tech

What does this mean in practice?

Build a secure platform for sharing. To harness the benefits of shared data, you first need to build need a shared platform that any party can use. And of course, this must be highly secure – to protect people's personal information and avoid any unwanted news stories.

Thiago Goncalves, Product Marketing Manager, New Mobility at HERE says: "The public sector has a great opportunity for further development and could: pursue standardized infrastructures across different cities and states – and even countries; ensure connectivity and good network coverage to enable data transfer; store more data – that's fresher and more accurate – securely in the cloud and start using real-time data for far more useful insights and delightful services

"For example, a city may want people to buy transport tickets directly from a third party app, or connect public and private services with one ticket. But this won't be easy if the backend isn't connected, or the cloud isn't interoperable with the mobility provider. To future-proof your city, a secure, standardized platform is no longer nice to have – it's essential.

Merge data. To create and enrich services, both cities and mobility companies need data. And they need to mesh it together for seamless mobility, based on rich and comprehensive information.

For example, a city running a study on bottlenecks could obtain far greater and more accurate insights if they merge data with a car-sharing company. And if they want to reduce crowding on subway lines in peak hours, they could increase the price for those on monthly tickets, and divert them to other forms of transportation, at a reduced cost. So you can offer a better user experience and increase number of monthly subscriptions to your service.

Read more about what you need to consider for an open data system

Get ready for data: use these handy cue cards from the Open Data Institute guide

"To create a democratized and optimal urban mobility mix, you need to allow not just one, but many mobility companies to access your systems. To make this happen, a secure, standardized platform is no longer nice to have – it's essential."

Thiago Goncalves, Product Marketing Manager, New Mobility, HERE

What about privacy?

Of course, true open collaboration means more flow of data through the world. It's right to be conscious of your responsibility for citizens' personal information, and to ensure any shared platform is highly secure, but it may also be time to look at this data in a new way...



We interviewed John Ellis, Big Data Futurist and author of 'The Zero Dollar Car.'

He explores a future where we not only take control of it, but monetize it."

Watch video

"Being open about how personal data is used, and how privacy is protected, helps to build trust in organisations collecting and using personal data. Greater trust means less friction when developing new ideas and services, and greater use of existing ones. It facilitates more connections and network effects. It helps consumers feel empowered, and leads to more informed choices about services that involve collection of personal data.

Openness makes things better."

The Open Data Institute

#3: Talk

Be honest, humble and open to change.



A collaboration is only as good as the communication between people. An open collaboration means honest discussions. It means listening to the other party. It means asking questions. It means understanding the needs, challenges and vision of the other side. Importantly, it means putting hierarchies aside.

Crucially, this means talking to people. As much as possible, face to face, but in general a phone call is better for relationship building than an email. Remember, small talk is no small matter.

Leen Balcaen says: "We've found that, far from common perceptions, city authorities are becoming more open to discussion with companies. They're more open minded and easier to approach than many think. They know they can't ignore the mobility problem, and that they need mobility companies on side to avoid chaos on the streets."

It's good to talk

Telcos can also offer creative solutions to helping with cities with urban mobility: for example, by helping optimize routes for garbage trucks, add on-demand lighting for urban areas and enable cameras to recognize people in crowds (for safety).

Stefano Gestaut, CEO, Vodafone IoT told SmartCitiesWorld that public sector understanding of new technology is crucial for speed of innovation: "It's not a coincidence that the most advanced countries ... are where you have a very young generation of leaders, such as in Estonia and Lithuania ... not only populations, but younger leadership and politicians ... people who don't need to [have it] explained [to them] why building something smart is better."

Read more

#3: Talk

What does this mean in practice?

- Go to conferences. Meet people, talk about things, enjoy networking. Alongside your technical knowledge, develop the soft skills necessary to build and maintain good relationships.
- Create use cases. To help these conversations, Leen recommends making three or so case studies of how a mobility project has worked: "Discuss the challenge, show how you solved it and highlight the results. Proof is far more effective than theory to persuade and influence. Especially in a risk-averse organization."
- **Bring in native speakers.** You can avoid any misunderstandings, and linguistic faux-pas by putting people who can speak each other's language in the room.
- Veer off-topic. There's a reason the golf course makes the business world go round. It's a chance to talk in a relaxed setting, away from a screen, and the pressures of the office. And it's fair to say that many a deal has been struck at the 18th hole. In the public sector, golf trips may be off the cards, but you can accept a modest lunch, or at the very least, stick to small talk for a while before getting down to business.
- Open up lines of communication. Help words and ideas flow between your organizations. This may mean setting up a dedicated email address, online group chat, weekly/monthly face-to-face meetings... whatever it is suits both parties. A city authority willing to share tacos on a Slack channel will go a long way to changing a startup's mind about the public sector.
- Put up a united front. Go a step further and join together under one organization, like the <u>Dallas Innovation Alliance</u> and <u>Sharing City Seoul</u>. This will help you collaborate more closely, and show the world you're working together to create a shared vision for the city.

"We've found that, far from common perceptions, city authorities are becoming more open to discussion with companies."

Leen Balcaen, Senior Director, Industry Solutions, HERE

United cities

5 examples of successful collaborations in innovative cities across the world.

United cities #1: Vienna

Testing, testing.



Why? Public transport voids.

In WWII, <u>20% of Vienna's housing</u> was partly or completely destroyed. Since then, it has been restored into a beautiful, safe and world-leading city – and has been named the <u>most livable city in the world</u> for the last ten years. But in recent years, gentrification has been accelerating, causing rapid population increases in some areas where public transport hasn't been able to keep up.

What? Joining the dots with self-driving buses.

The Federal Ministry for Transport, Innovation and Technology has funded a fleet of autonomus electric buses, <u>auto.bus – Seestadt</u>, as part of the "Mobility of the Future" scheme. As well as being a sustainable option, it's a way to quickly improve mobility, without needing to build a costly and time-consuming infrastructure. To prove it can work, the city is testing it in one area first.

The members of this collaboration are Wiener Linien (Vienna's public transport provider), Austrian Institute of Technology (AIT), KFV (board of trustees for traffic safety), TÜV Austria, Siemens AG Austria and Navya. According to this article, they: "collaborate in order to better understand and further develop self-driving technology. Wiener Linien aims to gain knowledge that helps to understand how autonomous shuttles can be integrated into the transport system of Vienna." Wiener Linien Managing Director, Günter Steinbauer, says: "Autonomous driving is a megatrend with the potential to change cities for good. As a public transport provider, we will be at the forefront of this."

The lesson?

Testing a solution in a small area before rolling it out is the ideal way for a new mobility company to bring a risk-averse city on board, and for a city to build a relationship with a company before committing large sums of money.

Links Visit auto.bus homepage

United cities #2: Dallas

Making it official with the 3Ps.



Why? Faster innovation.

The City of Dallas is a forward-thinking authority that wants to be on the forefront of new ideas, and has long engaged in emerging technologies and infrastructure. But it realized that to keep pace with rapidly changing technology, it needed to work with the private sector in a more agile way.

What? An independent organization to drive change.

Dallas founded a public-private partnership, or "3P," which <u>Government Technology describes as:</u> "currently enjoying a renaissance." The <u>Dallas Innovation Alliance</u> (DIA), founded in 2015, is a coalition of stakeholders from the City of Dallas, corporations, civic and NGO organizations, academia and private individuals. It trials and promotes innovative technology to solve urban mobility problems, but believes that people come first.

The DIA was formed in 2015, because: "a stand-alone organization tends to be more nimble when it comes to lining up private-sector partners or launching projects."

"Certainly in government, there's a lot of bureaucracy," Bill Finch, Chief Innovation Officer for Dallas told Government Technology. "We're not as flexible as the private sector would be – and I've worked in both." He goes on to say that a P3 removes some of the paperwork of working with different technology providers: "And so you can look at a lot more things at a much faster clip."

Jennifer Sanders, Executive Director of the DIA, explained: "What we wanted to do is put several different smart technologies into a compressed geographic area, so that we could understand not just how is each individual solution performing, but how could we utilize the data across projects."

And it's been a great success. She says: "I get calls every week from a new city that wants to just understand how this got built and could be built in their city."

The lesson? Jennifer Sanders says it all: "A free-standing organization can move quickly."

Links Visit the DIA homepage | Can P3s jumpstart smart cities?

United cities #3: Seoul

A shared vision for the future.



Why? Overcrowding, under-resourced.

Seoul is an advanced city, but with problems. As Forbes says: "simply put, too many people, too many problems, and not enough room." With a high population density and ageing populations, the city's resources are being stretched to breaking point: "Unless something happens ... instead of accumulating, of building new houses and buying new cars and other goods, people could start to share what they already have."

What? Pooled resources.

Shared City Seoul. This project: "mitigates various social challenges by promoting the shared use of both public and private resources, while at the same time boosting civic engagement and supporting local businesses." It has driven numerous innovative projects, like turning an abandoned building into a community center, renting out seniors' formal clothes to job seekers and Nanum car sharing.

"A big lesson is, if you're going to publicly declare yourself a sharing city, you better do something substantial or you're going to get criticized," says <u>Neal Gorenflo of Shareable</u>. "Seoul's effort has substance. There are significant resources behind it. It's well-integrated into their plans, and with their large innovation department, they'll be able to implement it."

Seoul was the pioneer, but other cities around the world quickly followed suit. In 2015, Amsterdam became the first European sharing city, paving the way for the Sharing Cities Alliance, founded in 2016 with by Amsterdam, Copenhagen, New York, Seoul and Toronto, and now comprising cities in all continents. Governments can apply to join here.

The lesson?

Share resources, work towards the same goals, and make sure there's substance behind your ideas.

Links

Visit Sharing City Seoul homepage | Nanum Car : Alternative public transportation enabled by sharing | Sharing City Seoul: a model for the world | Download pdf of Shared Cities book

United cities #4: Cape Town

Opening up the streets.



Why? Social and spatial divides.

Cape Town is a complex city. Built on a history of division, it has made great strides to bringing people together and creating a united environment. But it wanted to do more.

What? Volunteering to make change.

A group of volunteers set up Open Streets Cape Town (OSCT) in 2013, with the support of the <u>City of Cape Town</u> to: "challenge the paradigm of urban mobility by carrying out campaigns, temporary interventions, dialogues and walks that raise citizen awareness, spark public debate, and ultimately drive behaviour change around the role of streets in the life of the city." In all, it aims to create: "a more equitable, integrated, vibrant and safer Cape Town."

In 2018, the <u>Open Streets Exchange</u> event built on Cape Town's pioneering work to start doing the same for countries across Africa.

Most recently, in June 2019, the <u>Open Mobility Foundation (OMF)</u> to connect many states in the US. Erice Garetti, Mayor of LA said of the union: "The OMF is set to transform the way cities manage their mobile infrastructures in this modern era. City leaders like myself are constantly wrestling with how to embrace technology platforms to ensure they deliver a public benefit, not just a private one."

Taking the power of data science, and using it to improve our daily lives. It will improve things to make urban mobility a benefit to everyone."

The <u>Transformative Mobility Initiative</u> (TUMI) is another example of leading organizations from around the world joining forces to improve lives globally, not just locally – with partners including the German International cooperation for sustainable development, UN-Habitat, Asian Development Bank (ADB) and the Development Bank of Latin America (CAF).

The lesson?

Keep social issues front of mind. Never underestimate the power of people to make change. And look across borders – think of what you can do for the world, not just your world.

Links Open Streets Cape Town | Open Streets Exchange | Open Mobility Foundation

United cities #5: New York

Breaking down borders.



Why? Deregulation of eScooters.

For several years, eScooters have been regulated out of existence in New York. The city saw them as a nuisance. But eScooter companies still wanted in. And the public demand for eScooters has soared.

What? Regulation of eScooters.

Seeing the value that eScooters had added to other cities across the US, and how eScooters are rapidly taking over from dockless eBikes, New York city officials changed their minds. On June 19, 2019 these bills were passed by the New York Assembly and Senate, waiting for the final stamp of approval from the Governor.

The lesson?

Keep up the momentum. Even if the current landscape doesn't support your vision right now, things can change – and fast. Stay consistent with your vision, build relationships, create use cases and keep demonstrating how you can add value to the urban mobility infrastructure in your city, and improve the lives of citizens.

Get started today

With city chaos growing by the second, the time to take action is now. It's not as difficult as you may think. Here are three 10-minute things you can do today to open up to collaboration.

1. Brainstorm ideas

Now we've got the synapses firing (we hope), capture your thoughts and ideas before they disappear:

- What would a good collaboration look like for you?
- · What are your goals?
- How could a collaboration help you achieve them?
- What are your partners' goals?
- How can you help with those goals too?
- Who do need to work with and how?
- Who would you talk to?
- How does your organization need to open up?
- What infrastructure needs to be in place?
- How could your potential partners open up to you?

To help organize your thoughts, you can use these handy cue cards from the Open Data Institute paper, Get ready for data.

And if you're not sure where to start, feel free to speak to us at HERE first. We have over 30 years' experience bringing organizations together to share location intelligence, and would be happy to offer our advice.

2. Call someone

Choose one name on your list, and call them. On the phone. No emailing: no confused messages, no emojis, no distance. Better still, arrange a face-to-face meeting: in a café you love, not a sterile meeting room.

Ask what you can do to help. Whether you're a city authority wondering if you want another mobility company in the mix, or a mobility company wanting to show an authority that you belong, there's always something you can do to address the challenges of the other.

And if you're not sure where to start, feel free to speak to us first. We have 30 years' experience bringing organizations together to share location intelligence, and would be happy to offer our advice.

3. Book an event

Sign up for an event that's not in your area of expertise so you can meet more people from the "other side," and understand how they tick.

As well as getting you out of your chair, and seeing a new perspective, this has the added benefit of keeping you focused on collaboration and openness in the days leading up to the event. You'll find yourself looking differently at news stories, opinion articles and start to build empathy for the goals and visions of others – so the organization you may have thought of as "the monster in the room" actually becomes a potential partner for success.

Open at heart

How HERE can help harmonize your urban mobility.

In recent years, an increasing number of our customers were asking us to help them with their mobility goals. So we launched New Mobility Services in March 2019. Already, we're talking to 400 organizations, more than 80% of whom are new customers.

Here's how we can help you too:

Trust: open access to information

We work closely with cities like Hamburg, Chicago and [NAME] to create innovative solutions, using cutting-edge products, which can be customized to your city or company. We offer solutions for automobility operations, daily intelligence and more, so you can better process, analyze and monetize your data. These are founded on these core products, amongst others:

- HERE Routing
- HERE Transit

You can also be sure that we are GDPR compliant.

Tech: real-time data you can rely on

Forget static maps. With the world changing so fast, it's time to get real. We're the number one global location platform <u>according to Ovum</u> offering constantly updating datasets, location services and applications so you can understand the world around you, as it is right now.

How? We're owned by the world's most well-known car companies (Audi, Daimler, BMW and others), and are in four out of five of cars in Europe and North America. And we gather a rich source of accurate real-time data (about weather, traffic, hazards and more).

Our Open Location Platform (OLP) enables your data to flow more easily between the organizations you work with. Read more.

Talk: a collaborative approach

You can't do it alone. This is one of our core beliefs at HERE. We will work closely with you to tailor solutions to your needs, and help you find the right partner for other areas. We'll also help you communicate with other parties, to ensure the smooth running of any project. We offer ongoing support to help you continue to work towards your goals.

In fact, our company is built on collaboration. Our shareholders are some of the world's leading automotive companies, who decide to unite to offer the best location intelligence on the market: Audi, BMW, Continental and Daimler. Our technology shareholders include Intel, Pioneer and Bosch and strategic partners include Amazon web services, fellow location company, ESRI, and Oracle. More on our partners.

HERE Products

More about our location intelligence technology for better urban mobility.

HERE Routing

Intelligent routing algorithms for safe and efficient journeys.

We offer a variety of HERE location services so you can provide advanced routing options for commuters travelling to your city center:

- · Vehicle routing
- Public transit routing with real-time and timetable departures
- · Pedestrian routing with pedestrian connectivity
- · Real-time traffic and traffic incidents
- Public transit service delays/disruptions information from transit authorities
- Amenities available at transit stations or nearby (eg off-street parking, EV charging)

Intermodal routing reduces driver's stress associated with daily commutes by avoiding traffic or construction work along a route. It also shortens daily commuting time and ensures a more reliable ETA by providing alternative options – and enables various location functionalities related to drive, park and ride:

- Drive, park early and ride to final destination
- Drive, park late and ride to final destinations
- Drive, park while on the go and ride to final destination

HERE Transit

Transit context that solves complex commuting problems.

A set of RESTful web services that allow for development of applications with feature rich transit and pedestrian experiences. It leverages a rich portfolio of data from public transit authorities, external agencies as well as HERE proprietary map content, to enable a complete door-to-door user experience.

Using HERE Transit, you can provide users with the best A to B routes that combine walking and public transportation directions, as well as next transit departure information for nearby stations. It intelligently switches to estimated transit routing when no timetable transit routing coverage is available, enabling a complete transit experience:

- Discovery: Station search, Nearby station, Coverage information, Line information, Service alerts
- Departures: Next nearby departures, All next departures
- Directions: Dynamic transit routing with pedestrian connectivity and pedestrian routing

Open Location Platform (OLP)

One system. Every tool you need to build datasets and exchange information.

OLP is HERE's highly accurate, global and upto-date location data made available through one system – helping you enrich your own data, to create new products and services.

With OLP's big-data processing and framework capabilities, you can:

- Enrich maps: create customized maps, using HERE maps as a basis and adding additional layers using supplementary data
- Analyze data: derive insights and automatically generating reports, analysis and alerts
- Process events: access a continuous stream of data to extract useful insights from real-world events
- Visualize data: represent data in a graphical form such as, graphs, charts and maps
- Archive data: storing and retrieving the data based on a criteria defined by the user

OLP is a two-sided platform that enables you to sell and buy data, as a:

- Data producer: sell a dataset that a customer owns, enabling them to create additional revenue streams
- Data consumer: buy datasets to meet your business imperatives

Watch video

Dive deeper

From <u>our blog</u>, to eBooks, to articles from leading publications, here's some recommended reading for you to learn more about the future of urban mobility, and HERE's vision for it.

From HERE

Download Enabling greater mobility in

the on-demand economy

The HERE Urban Mobility Index

Read Why collaboration is key to

the smart city

Data allows cities to open up

to us

Privacy: how HERE handles

personal data

#mobility #smartcities

#datavisualization

Watch We asked the experts for

their vision of the future of

urban mobility

And beyond

Urban Mobility Innovation Index: a study of

cities around the world

The future(s) of mobility: how cities can

benefit, McKinsey & Company

Better public-private collaboration key to

urban mobility, SmartCitiesWorld

Rethinking urban mobility, interview with

Morgenstadt initiative, Freudenberg

Guide to getting ready to share your data,

from the Open Data Institute (ODI)

Sharing Cities book from Shareable (free

download but gated content), shares 100 case studies in 35 countries, with mobility chapter

starting on page 61

Openness principles for organizations sharing

personal data, from the ODI

Collaboration is the key to smart(er) cities,

SmartCitiesWorld

Benefits of open data for smart

cities, bee smart city

The future of mobility, Deloitte (about how

cities should regulate for new technologies)

How public and private sector collaborations

can help overcome the challenges of urbanization, EY (Ernst & Young)

The need for "data stewards" when sharing data with other organizations, from the ODI

Meet the contributors

To bring you this guide, we picked the brains of our own HERE experts on smart cities and new mobility. Thanks to both of them for their wisdom, industry insights and shared passion for improving lives through better collaboration.



Smart cities

Leen Balcaen

Senior Director, Industry Solutions, EMEAR

Leen leads the EMEAR Industry Solutions team at HERE. She provides in-depth insights and expertise on how location and location-based services play a key role across industries and sectors like smart cities, transport and logistics, retail, insurance, media and more.

Previously, Leen led the HERE Cities, Public Sector and Infrastructure team, where she defined the strategy and vision for HERE Cities – which she is now executing in her current role.

Leen lives in beautiful Gent, Belgium, loves to cook and climb the Rockies in her free time, and her superpower would be to fly (but she's going to start with helicopter lessons).

More from Leen

How businesses can unlock their smart city success, TechRadar

Q&A with Smart Magazine: connected cities, sensors, and the city of the future

Why collaboration is key to the smart city, HERE360 blog



New mobility

Thiago Goncalves

Product Marketing Manager, New Mobility

Thiago leads the New Mobility segment in the Product Marketing department. He's responsible for building dedicated solutions that address market challenges.

He has extensive experience in the automotive industry, having held positions in Product Marketing, Product Planning and Market Research at Nissan and General Motors. He was also responsible for Strategic Marketing Management at 3M in the Mobility and Safety Transportation department. Thiago is from Brazil and loves to travel – and try out local mobility solutions from around the world. As a commuter, he doesn't only work to provide new solutions, but experiences them every day.

More from Thiago

How location intelligence is shaping the future of mobility, webinar with Automotive World



What are your urban mobility goals?

For true collaboration, conversation is everything. Tell us about your urban mobility challenges and we can develop solutions to solve them. We'd love to hear from you.

Get in touch

About HERE Technologies

HERE, the Open Location Platform company, enables people, enterprises and cities to harness the power of location. By making sense of the world through the lens of location we empower our customers to achieve better outcomes – from helping a city manage its infrastructure or an enterprise optimize its assets to guiding drivers to their destination safely. To learn more about HERE, including our new generation of cloud-based location platform services, visit 360.here.com and here.com