Driving business using the City Benchmarking Study

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Why

What does "good" mean in city service delivery?

— We launched a new city benchmarking study to help cities better understand how well they are doing in delivering services compared with other cities around the world and identify best practices.

— Worked to identify 12 services they liked to survey and evaluate them using two performance indicators:

1. Efficiency indicator (cost per unit of service)

2. Effectiveness indicator (value service provides to clients)

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Statistics

Cities

Over 200+ cities contacted,
53 agreed to participate,
35 able to provide benchmark info

Countries

Global representation from 20 countries/ territories — across Europe, Asia-Pacific, North and South America, Africa/ Middle East
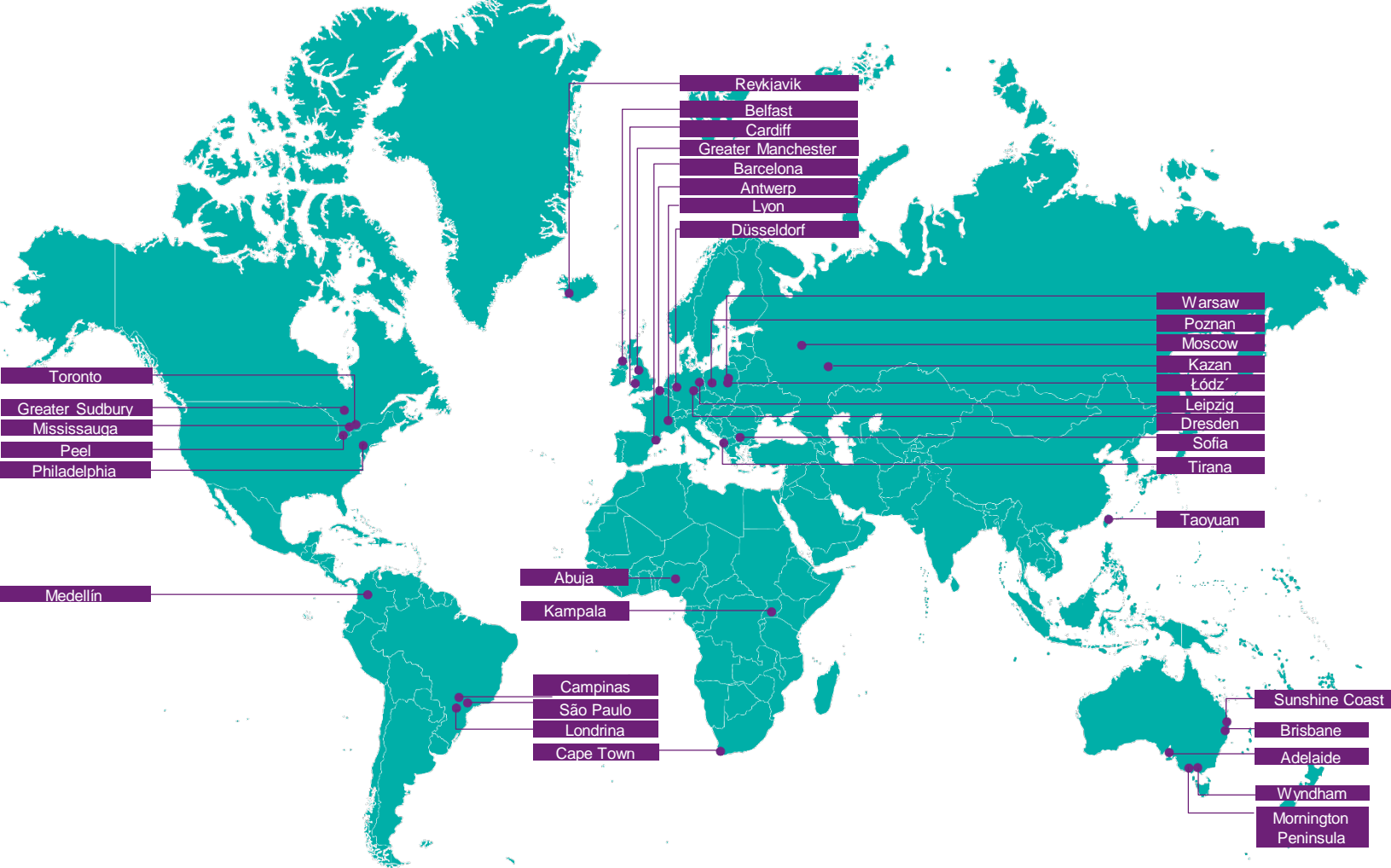
Services

Started with a list of 120+ public services (excluded internal services this round) and selected the top 12 based on city preferences

Respondents

Predominantly city managers or chief executives, directors of performance management, and/or department heads

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Cities that participated

Reykjavik
Belfast
Cardiff
Greater Manchester
Barcelona
Antwerp
Lyon
Düsseldorf

Warsaw
Poznan
Moscow
Kazan
Łódź´
Leipzig
Dresden
Sofia
Tirana

Toronto
Greater Sudbury
Mississauga
Peel
Philadelphia

Taoyuan

Medellín

Abuja
Kampala

Campinas
São Paulo
Londrina
Cape Town

Sunshine Coast
Brisbane
Adelaide
Wyndham
Mornington Peninsula

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Services we benchmarked

1. Road access

2. Transit

3. Small and medium enterprise development

4. Building permission and enforcement

5. Park access

6. Recreation facility access

7. Drinking water supply

8. Wastewater removal

9. Storm water drainage

10. Fire rescue

11. Garbage collection

12. Waste diversion and recycled waste collection

Creating consistency: using the municipal reference model

At its most basic, there are four key components to the Municipal Reference Model that were instrumental for the City Benchmarking Study:

— *Service:* This reflects a commitment to provide service outputs that satisfy one or more recognized needs of a client. For example, the taxi licensing service delivers a taxi license to taxi cab operators to ensure compliance with safety regulations.

— *Service output:* Service output is defined as the unit of delivery of a service that addresses a recognized need. For example, a taxi operator receives the taxi license output to fulfill their need to operate a taxi.

— *Efficiency Indicator:* This is a measure of productivity calculated by dividing the quantity of output (measured in units of delivery) by the quantity of resource inputs (usually measured in person hours per dollars). So, for example, how much it costs the city to process and approve a single taxi license.> Unit cost

— *Effectiveness indicator:* This measures the extent to which a service contributes to achieving desired outcomes. For example, the turnaround time to issue a taxi license or the taxi condition rating (viewed from the perspective of the taxi patron).> achievement of value

Summary of findings

Road access — The average cost per lane kilometer of road is slightly more than US$15 000. While many of these cities report that roads are in good condition, including several at 100 percent, why is it that vehicular accidents appear be higher in large northern cities? In addition, it's clear that climate and terrain are important factors in both road condition and vehicular accidents.

Transit Service — Average cost (opex and capex) is US$1.67 per transit trip. Of the cities that provide transit, we observed a distinct grouping of cities that cover 30–40 percent of their costs through fares. Decisions with respect to service quality — headway, mode, geographic coverage — need to be taken within an overall city/urban structure strategy.

Small and medium enterprise (SMEs) development — While on average it costs US$330 per consultation, few cities know if they are effective in increasing SME employment.

Building permit and enforcement — Building permits take 50 days to process on average. However, one city reports 684 days on average (almost 2 years) leading to contractors and developers routinely violating the development approval process. Along with facts on efficiency and effectiveness, the study identified innovations such as Cape Town, South Africa introducing electronic submissions of applications and plans.

Park access — At a cost of almost US$13 000 per hectare on average, most cities boast excellent park coverage (walking distance) to meet resident needs, but few cities know the extent of park usage. This makes it very difficult in a cash constrained environment to justify expenditures on this very important amenity.

Recreational facility access — Recreational facilities cost US$61 per program participant and in many cases don't cover this cost. This severely inhibits the city from operating and maintaining these facilities on a long term basis.

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Summary of findings

Drinking water — Drinking water costs US$1.14 per cubic meter on average. We observe a meaningful grouping around the 10 percent average but one city loses 65 percent of its water (from the time it is treated to the time it is supplied)! Causes could include leakage from faulty mains, theft or the provision of non- revenue water. How can a city afford to lose two-thirds of its water?

Wastewater removal — Only one city reported 100 percent of coverage of wastewater removal services. Costs averaged at US$47 000 per sewer kilometer (kilometer of wastewater network). Creative solutions about reducing wastewater discharged into the network are now starting to emerge as pumping and treatment costs increase with changing regulations.

Storm water drainage — Not many cities could provide the quantity of storm water drained but those that did reported costs ranging from a low of US$0.01 to a high of US$1.98 per cubic meter. Important to note is that cities need to accommodate storm surge capacity, not the mean storm water volume. With extreme weather events on the rise, keep an eye on how innovative this service will evolve in the years ahead.

Fire rescue — Fire response rates average just over 8.5 minutes but really effective cities are coming in at 7 minutes. Two thirds of survey participants respond between 7 and 8 minutes. Benefits are evident not only in the value proposition but also in insurance rates faced by property owners.

Garbage collection — While garbage costs range from US$30–US$580 per ton, three cities make money on garbage collection through direct charges. All cities should examine whether or not garbage collection should be funded out of general tax revenue or whether a specific charge should be levied.

Waste diversion — The average city diverts 37 percent of its waste but there is much to learn from one city that diverts 98 percent of its waste!

Transformative Trends

Road Access

— Shifting customer expectations and demand: The widespread adoption of personal navigation apps, car sharing models and vehicle autonomy tools is changing demand for roads.

— Adopting new approaches: Traffic flow systems, free flow models and other alternative models can help reduce road volume and better manage new capital costs.

— Promoting traffic safety: Many cities are looking at ways to improve overall road safety for vehicles, pedestrians and bicycles while simultaneously improving traffic flow.

— Improving outsourcing: Municipalities are rethinking their existing outsourcing agreements to understand how value is created and captured.

— Leveraging data: As cities become smarter, many are using this data to drive improvements in operations, planning and investment.

Transit Services

— Healthy lifestyles: As populations seek more active and healthier lifestyles, demand for cycle paths and non-motorized transport options is rising.

— Environmental stewardship: Growing concerns about carbon emissions and new environmental policy targets are encouraging transit authorities to invest into low (or no) carbon transit alternatives and vehicles.

— Capacity improvements: Leveraging new technologies and process improvements, many cities are delaying new capital investments by focusing on improving the capacity of their existing assets and networks.

— Intermodal connectivity: Cities are increasingly focused on enhancing connections between various modes of transit in an effort to reduce passenger travel times and improve overall system effectiveness.

Transformative Trends

Small and medium enterprise (SMEs) development

— Integrating and electronic service delivery: As part of the wider digital transformation of government, many cities are focused on shifting certain SME development services and processes to digital channels enabled by cloud computing.

— Encouraging inter-government coordination: City leaders are working closely with counterparts in regional and national government to improve SME supports such as tax incentives and infrastructure.

— Evaluating success: In an effort to improve the effectiveness of services, cities are introducing tools and mechanisms to track client progress following certain interventions.

— Targeted supports: City leaders are carefully analyzing the needs of their local SME ecosystem and creating supports that focus on achieving certain policy objectives.

— Shifting to non-financial: Facing rising budgetary pressures and widening service expectations, cities are moving away from providing blunt financial supports such as grants in favor of more advisory-based services.

Building And Enforcement

— Reducing complexity: A number of cities are currently exploring how they might reduce the overall complexity and burden of permit applications by streamlining processes and integrating applications.

— Leveraging technology: New IT systems and mobile platforms are helping building permit authorities improve effectiveness and enhance customer satisfaction.

— Managing resources: Rising demand for permits and — in some cities — citizen complaints have forced authorities to rethink the way their resources are deployed and supported.

— Aligning revenues: Cities are starting to take a more sophisticated approach to setting fees that reflect the complexity of the project, the resources required and the responsiveness of the contractors.

— Improving approval rates: Some cities are monitoring the number of applications that are approved after their first submission to identify further opportunities for improvement.

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Transformative Trends

Park Access

— Rising expectations: As residential density increases and citizens become more focused on health and environmental concerns, expectations for parks facility quality, access and service levels are rising.

— Encouraging biodiversity: By introducing native plants, meadows and un-maintained green space, cities are improving the diversity of park features, reducing costs and enhancing environmental sustainability.

— Improving standards: From asset quality standards through to environmental and maintenance standards, many cities are now focused on creating a more consistent quality of service across park assets.

— Seeking new revenues: Some cities are working to introduce and modernize retail facilities within parks as potential new sources of revenue.

Recreational facilities

— Cost recovery: Many municipalities are starting to move towards a greater focus on cost recovery to support ongoing renewal, maintenance and revitalization of assets and programs.

— Demographic shifts: Greater female participation in sports, shifting demographic demands and aging populations are forcing municipalities to rethink their portfolio of assets and services.

— Private participation: Municipalities are increasingly looking for ways to improve efficiency and service levels by working with private operators and contractors.

— Connected populations: Cities are finding new ways to connect with their citizens to encourage active lifestyles and improve participation in recreational and sports programs.

— Asset management: Particularly in more mature cities, greater focus is being placed on updating and revitalizing aging assets and facilities to respond to new demands and improve costs.

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Transformative Trends

Drinking Water

— Rising standards: In many regions, regulators and authorities are tightening the base drinking water standards, testing and reporting requirements.

— Prioritizing replacement: More established cities are working to replace and upgrade their aging underground infrastructure and assets.

— Seeking innovation: Rather than tearing up city streets, many water authorities are exploring new approaches for strengthening and expanding the capability of their current assets.

— Declining customer complaints: As water meters become more sophisticated, many water authorities are seeing their rates of meter-related customer complaints fall.

— Growing policy issue: In many regions, disagreements over water rights and ownership will lead to growing political tensions and potential security challenges as populations migrate to find more reliable sources of potable water.

Wastewater removal

— Treatment innovation: Many cities are exploring new approaches for treating wastewater and managing biomass that reduce treatment costs, improve efficiency and better manage unwanted byproducts and odors.

— Wastewater reuse: Changing attitudes now see the reuse of treated wastewater as an untapped resource

— Upgrading the network: From new treatment plants and reservoirs through to upgraded collection assets and infrastructure, cities are investing significant capital to expand and modernize their wastewater network.

— Decreasing volumes: While overall volumes may be increasing, some cities note the per-capita volume is decreasing as people adopt more conservationist approaches.

— Building the future workforce: Recognizing the growing challenge of attracting new talent to the wastewater sector, a growing number of cities are now thinking about how they might entice millennials into the workforce.

Transformative Trends

Storm water Drainage

— Increasing risk: The frequency and severity of storm events is rising causing many cities to rethink their 'design storm' scenarios.

— Rising regulation: Environmental regulators, planners and policy makers are increasingly focused on ensuring that storm water discharge is treated and managed in a way that preserves the local environment and reduces the risk of flooding.

— Splitting services: Cities that have historically relied upon shared storm water and waste water infrastructure are now working to separate the two in order to improve efficiency and ensure proper treatment guidelines are being followed.

— Changing funding models: Many cities are exploring new ways to shift the cost of storm water services away from the public budget through user fees and other charges.

Fire Rescue

— Dissecting risks: As the urban landscape changes and fire suppression and rescue needs change, cities are beginning to get more 'granular' in their understanding and assessment of risks, particularly at the industrial and commercial level.

— Distributing the footprint: Some cities are considering how they might move services closer to demand by placing 'storefront' locations within specific hotspots such as office complexes and housing developments.

— Shifting to prevention: Recognizing that fire prevention is more cost effective than fire suppression, cities are exploring how they might shift resources towards encouraging prevention services without impacting the effectiveness of suppression services.

— Improving resource value: In response to the shift towards prevention and the need to do more with less, some cities are looking for opportunities to improve the value of their existing assets (both human and capital) by, for example, adding more personnel to each piece of equipment.

— Measuring real response times: As developments become increasingly vertical, fire authorities are looking for ways to better measure their time of response to the scene of the incident rather than the street location.

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Transformative Trends

Garbage Collection

— Increasing demand: Growing urban populations and changing urban landscapes are forcing garbage collection authorities to continuously optimize their waste collection routes and forecasts.

— Overcoming resistance: Evidence suggests that some cities continue to struggle to convince local residents of the value of waste diversion and recycling programs, resulting in missed targets and additional investment requirements.

— Responding to regulation: In many markets — the European Union in particular — new waste diversion and recycling targets are creating new pressures on existing garbage collection systems.

— Reducing streams: By limiting the types of material that can be collected, some cities are reducing the number of waste streams they must manage and separate.

Waste Diversion

— Civic environmentalism: Inspired by environmental concerns and a growing desire to participate in global climate change targets, many citizens are demanding increased recycling efficiency and effectiveness.

— Increasing reuse: Particularly in industrial and commercial settings, organizations are working harder to reuse secondary materials which, in turn, impacts disposal volumes.

— Innovative approaches: A growing number of cities are exploring new approaches for collecting, handling, separating and storing recyclable materials, particularly in sensitive urban areas.

— Promoting mono-stream packaging: In an effort to reduce the number of recycling streams, some cities are working with retailers and manufacturers to encourage the adoption of mono-stream packaging.

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It is hard to have the courage -to change, to innovate, to improve - when you don't have all the facts.

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