Creating Sustainable Cities through
DIGITAL FINANCIAL INCLUSION

60% of the global population will live in cities by 2030,[1] but many will not enjoy the potential benefits of urban life.

THE OPPORTUNITY

Cities rely on crucial public services such as affordable housing and transportation, but delivering these services using cash is highly inefficient and costly. Digitizing payments could save 100 major cities $470 billion every year by addressing these inefficiencies and avoidable costs.[2]

CHALLENGES*

Public transport systems are often **inefficient** and do not sufficiently respond to users' needs.[3]

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30% of the urban population in emerging economies lives in **informal settlements**, often in poor living conditions.[5]

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Congestion is worsening, particularly in middle-income countries. In Egypt, traffic jams in Cairo cost 4% of national GDP annually.[9]

SOLUTIONS*

Collecting fares digitally **reduces the time, cost, and potential for leakages**. Digital fare payments can also generate **valuable data** to improve transportation routes and service delivery.[4]

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Micro-mortgages enabled by digital payments can make it easier for people living in informal settlements to invest in adequate housing.[6,7,8]

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Electronic toll payments **reduce the congestion** caused by cash toll collection.[10] They enable more **flexible and effective congestion pricing** and encourage **ride-sharing** networks.[11]

"Make cities inclusive, safe, resilient, and sustainable."

RWANDA Moving from cash to tap-and-go smart cards for buses in Kigali helped the bus operator to **raise revenue by 140% in just one month**, mostly by reducing leakages.[12]

SINGAPORE Smart commuter cards enabled Singapore to use payment, geo-localization, and censor data to improve transportation planning. The smart cards also support the travel rewards program to manage overcrowding by allowing commuters to earn points by choosing alternative routes. As a result, the country **reduced crowding issues by 92%** and waiting times by three minutes despite growing daily ridership.[13]

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SWEDEN The introduction of digitally enabled congestion charges in Stockholm **led to a 22% reduction in traffic volume after a few weeks** that led to a 30%–50% reduction in congestion and a 10%–15% reduction in emissions over seven years.[14,15]

COLOMBIA Smart public transport transit cards in Bogota **lifted ridership by 56%** among recipients in just one year. This helped reduce traffic congestion and encouraged participation in the labor force.[16]

* These represent only a few of the many important challenges and solutions. They should not be read as an exhaustive list.

1 United Nations, 2016   **2** Visa, 2017   **3** Sum4ALL, 2017   **4** Visa, 2017   **5** UN-Habitat, 2016   **6** Lalwani, 2012   **7** Mendelson et al., 2017   **8** World Bank, 2015   **9** World Bank, 2014   **10** Fleming, 2012
11 FHA, 2017   **12** Iqbal, 2016   **13** Singapore Smart Nation, 2018   **14** Eliasson, 2014   **15** Transport Tyrelsen, 2018.   **16** Hernandez & Quiros, 2016