

SHARECITY BRIEFING NOTE 2

# SHARECITY Profiles

## Urban food sharing landscapes in 10 cities



# Introduction

This briefing note provides an introduction to ten cities – Athens, Barcelona, Berlin, Dublin, London, Melbourne, New York City, San Francisco, Singapore and Zurich – in terms of their food sharing landscape and wider socio-economic, environmental and governing context. These cities have been selected from the SHARECITY100 database, and researchers will build on these profiles through in-depth ethnographic research with a number of ICT-mediated food sharing initiatives and wider stakeholders in each city.

---

## WHAT IS SHARECITY?

SHARECITY is a five-year research project funded by the European Research Council, which identifies and examines the diverse practices of urban food sharing initiatives that use **information and communication technologies** to mediate their sharing.

### SHARECITY has four objectives:

1. To advance theoretical understanding of contemporary food sharing.
2. To generate a significant body of comparative and novel international empirical knowledge about urban food sharing initiatives and their governance.
3. To design and test an assessment framework for establishing the impact of urban food sharing economies.
4. To co-design scenarios for sustainable urban food sharing futures with stakeholders.

## WHAT IS FOOD SHARING?

As there is no agreed definition of what counts as food sharing, we extend a dictionary definition of sharing:

**“having** a portion [of food] with another or others; **giving** a portion [of food] to others; **using, occupying** or **enjoying** [food and food related spaces to include the **growing, cooking** and/or **eating** of food] jointly; possessing an **interest** [in food] in common; or **telling** someone about [food]”.

(Adapted from Oxford University Press, 2014)

This definition emphasises the practices and experiences of **having things in common** and **doing things together** around food, including but moving beyond commensality; the practice of eating or drinking together. Such a definition includes attention to what is shared, from raw materials (e.g. crops) to products (e.g. processed food products or tools and cooking utensils) and services, as well as capabilities (knowledge and skills) and spaces (e.g. fields, allotments, gardens, and kitchens).

---

## WHY IS SHARECITY NECESSARY?



### Planetary urbanisation and unsustainable cities

The majority of the world's population now live in cities, a figure that is predicted to rise to 70 per cent by 2050. Not only does this have implications for those living in urban areas, it also has implications for those beyond these sites who are inevitably involved in providing for an urban future. Urban areas already account for 80 per cent of the world's resource consumption and most of the world's waste.



### Sustainable Development Goals

Following disappointing action on the Millennium Development Goals, the 2030 Development Agenda has been framed around 17 Sustainable Development Goals, which include ending hunger (Goal 2), creating sustainable cities and communities (Goal 11) and ensuring responsible production and consumption (Goal 12). These are not discrete goals and attention to their intersection is needed.



### Milan Urban Food Policy Pact

At the second meeting of the Milan Urban Food Policy Pact in 2016, the Director General of the Food and Agriculture Organisation (FAO) José Graziano da Silva, called for cities, big and small, to help construct urban food systems that will be sustainable and resilient in the face of changing climates. By the beginning of 2017 there were 138 cities from around the world who had signed the Pact.



### Innovative cities

Cities are complex networks of political, economic and socio-spatial processes that are both intimately local and also globally connected. They provide sites where diverse human and non-human resources intersect on cultural, material and technological levels. As a result, cities are also hotbeds of innovation, including the development of innovations for urban food systems.



### ICT-mediated sharing economies

Sharing, including food sharing, is increasingly being identified as a potentially transformative mechanism for sustainable cities, by reducing consumption, conserving resources, preventing waste, and providing new forms of socio-economic relations. Research into contemporary practices of ICT-mediated food sharing is currently lacking.

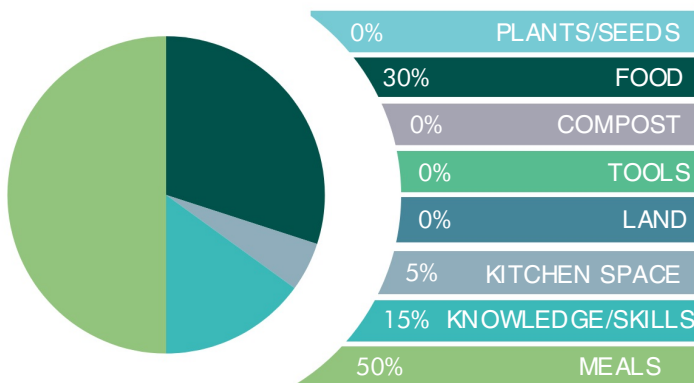


**SHARECITY** will progress understanding of meta-societal issues by generating extensive and comparable data of the practices and impacts of ICT-mediated food sharing.

# ATHENS



Athens is ranked 83rd in the SHARECITY100 Database of global ICT-mediated food sharing, with 14 initiatives currently active in the city.

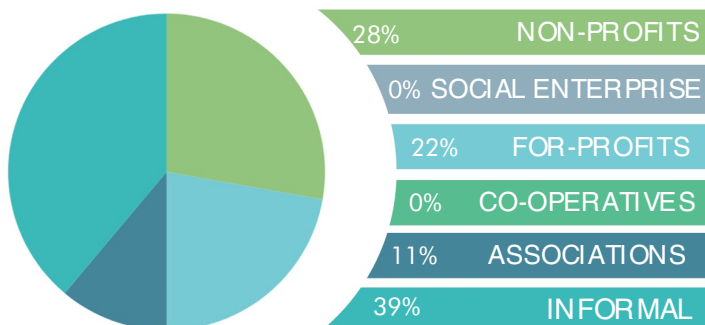
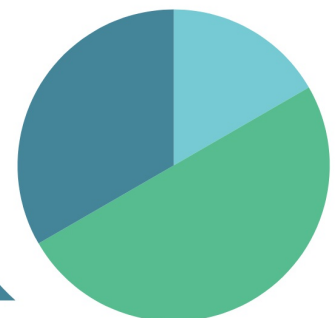
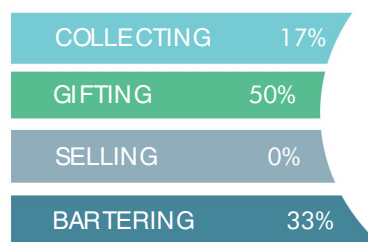


## WHAT IS SHARED

Meals are the most common good shared by Athens food sharing initiatives accounting for half of all sharing activities, followed by food (including fruit, vegetables, meat, fish, and food products) and knowledge and skills. No ICT-mediated initiatives in Athens were found to share plants, seeds, compost, tools or land.

## HOW IT IS SHARED

Gifting is the most common form of exchange used by food sharing initiatives, making up half of all activities, followed by bartering and collecting. No food sharing initiatives were found to use selling as a form of exchange and 20% were found to utilize more than one exchange mode.



## SHARING ORGANISATION

Informal food sharing initiatives are the most common type of initiative in Athens, followed by non-profits (including charities) and then for-profit enterprises. No food sharing initiatives were identified as using the social enterprise or co-operative structure. 20% of initiatives employed more than one organisational form.



---

## GEOGRAPHY & POLITICS

---



Athens, the capital and largest city of Greece, is located in the Attica region on the Balkan Peninsula. The Attica region covers a about 3% of the total surface of Greece, and has a population of 3,828,434 (35% of the national population) (1). The city of Athens is one of the most ancient cities in the world, with traces of human habitation on the Acropolis, an ancient citadel located in the city, dating back 7000 BCE (2). The Parthenon, a temple on the Acropolis and a UNESCO World Heritage Site, is regarded today as the symbol of Classical Greece and of the beginnings of Western civilization.

The city is comprised of seven City Districts, each with its own council which manages a wide range of local services including sanitation, environmental conversation, greenery, road maintenance, transport, lighting, urban planning, and schools (3).

---

## ECONOMY & SOCIETY

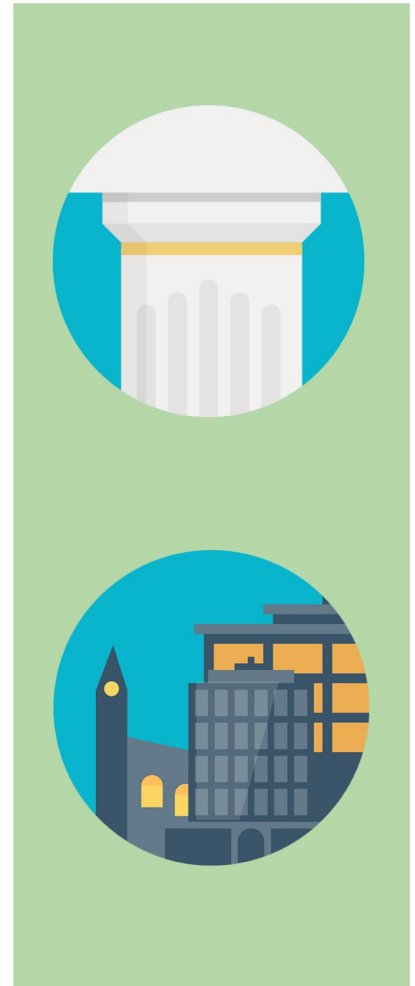
---

Greece joined the European Community in 1981, becoming part of the Eurozone and adopting the Euro in 2001. Tourism makes up 17.3% and supports 401,000 jobs or 11.3% of national employment (4). It has been estimated that the informal sector accounts to 24.3% of GDP.

In 2004 Athens hosted the Olympic Games, investing not only in sports venues, but also in large-scale infrastructural works such as an airport, suburban rail systems, and highways, transforming the suburban landscape of the city (5). The country has been deeply impacted by the financial crisis of the country which officially started in 2009. Since 2010 the GDP of Greece has reduced by 25% and the drastic austerity measures implemented by the Greek parliament have provoked numerous riots and demonstrations and ultimately the rejection of austerity proposals from the country's creditors by the Greek people at a referendum (6). Financial supports from international agencies are still being negotiated at the behest of the IMF and ECB.

Urban space and urban life in Athens have been deeply affected by the crisis, and a 2015 report ranked Athens 44th for wage level and 45th for domestic purchase power out of 71 global cities (7). Unemployment levels are high, with youth employment in the Attica region reaching 46.5% in 2016 (8) and over 20% of the general population being viewed as at-risk-of-poverty (9). Since the austerity measures were introduced there has been also a noted increase in suicides among citizens of working age (10) and more than 200,000 university graduates have left Greece for countries such as Germany and the UK (11).

Greece has a fairly homogenous population, with only 6% of the population made up of non-nationals (12). Though traditionally an emigration country, it started receiving the first flows of migrants from Central and Eastern Europe during the 80s, mainly, from Albania, Russia and Pakistan (13). 40% of the foreign population now reside in the municipality of Athens, making up 19% of the city's population (14). In recent years there has been a huge increase in asylum applications by refugees from Syria, Pakistan and Afghanistan (15). Together with Italy Greece has been the European country most affected by the refugee crisis, receiving 300,000 new arrivals by sea in 2016. It is estimated that 172,160 refugees are currently residing in Greece (16).



# FOOD, ENVIRONMENT & SUSTAINABILITY



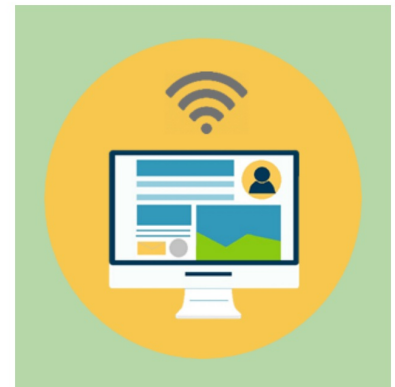
Despite the renowned health benefits of its Mediterranean diet, Greece has one of the highest rates of adult, adolescent and childhood obesity in the EU (17). Additionally a 2012-2013 program analysing food insecurity in Greek schools revealed 64% of children participating were at risk of food insecurity and many pupils had experienced hunger (18). This program also provides free healthy meals to all students in the participating schools and encourages and educates the pupils and their families about healthy eating (19). Various organisations on the ground have organised themselves to respond to the increasing level of food poverty, which is particularly evident in the city (20). Grassroots initiatives such as soup kitchens are forming and expanding in Athens to address the needs of elderly population and homeless people (21). Since 2012 the city of Athens has a Sustainable Food Policy, aiming to help vulnerable groups and feed the poor (22), and in 2015 the Mayor of Athens signed the Milan Urban Food Policy Pact.

Athens was ranked 22nd out of 30 cities in the Siemens Green City Index, with its low ranking is largely a result of poor air quality and management of waste and land use (23). Residents of Athens are exposed to significant levels of air pollution caused mainly by traffic, domestic heating and industry, and despite the implementation of numerous measures to improve air quality, the concentration of air pollutants is currently exceeding the levels recommended by the World Health Organization (24). Such environmental programmes can be hindered by the overlap in jurisdiction between the city authorities, the Ministry of the Environment and the Ministry of Transport.

## TECHNOLOGY

Athens has 100% broadband coverage and high levels of internet penetration at 79% (26). The European Innovation Partnership on Smart Cities and Communities lists a wide range of commitments embraced by the city of Athens in the fields of technology and sustainability (27), and in 2017 Athens will host the Building Green Expo, an exhibition in the fields of sustainability, green buildings, and energy-saving technologies (28). Despite the challenging economic landscape, some start-ups have been successfully established in Athens and elsewhere in Greece, and the Athens Tech College plays a very active role in promoting technology and entrepreneurship.

In 2014 the city won the Bloomberg Mayors Challenge with the project synAthina, which was initiated by the former Deputy Mayor for Civil Society of the Athens municipality. synAthina is a web platform for civil action groups, which aims to increase citizens' participation in the civil life of neighbourhoods and of the city (29) (30).



CITATION: Please cite as: Davies et al (2017) Athens SHARECITY Profile, Trinity College Dublin, Ireland

ACKNOWLEDGEMENT: SHARECITY is funded by the European Research Council (ERC) under the European Union's Horizon 2020 Research and Innovation programme (Grant Agreement No. 646883).

## REFERENCES:

---

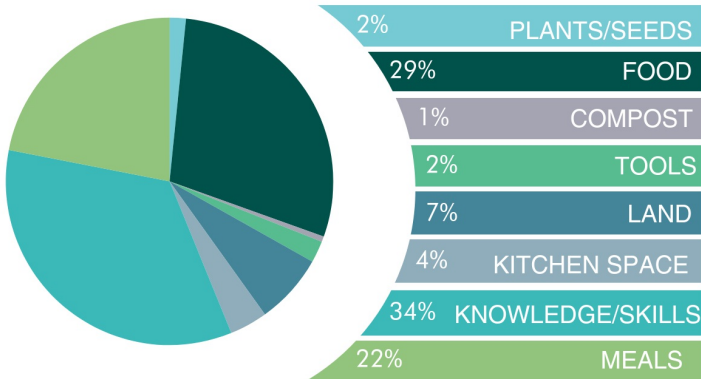
- (1) [http://www.statistics.gr/documents/20181/1515741/GreeceInFigures\\_2016Q3\\_EN.pdf/7e0fef2f-32f0-4492-8a45-b4a94ea144ee](http://www.statistics.gr/documents/20181/1515741/GreeceInFigures_2016Q3_EN.pdf/7e0fef2f-32f0-4492-8a45-b4a94ea144ee)
- (2) <http://www.ancient.eu/Athens/>
- (3) <https://www.cityofathens.gr/en/node/7567>
- (4) <http://sete.gr/en/strategy-for-tourism/basic-figures-repository/>
- (5) <http://www.wttc.org/-/media/files/reports/economic-impact-research/countries-2016/greece2016.pdf>
- (6) <http://www.citylab.com/design/2012/07/how-garbage-pickers-athens-predicted-greek-economic-crisis/2425>
- (7) <https://www.theguardian.com/world/ng-interactive/2015/jul/05/live-results-greek-referendum>
- (8) <https://www.ubs.com/microsites/prices-earnings/prices-earnings.html>
- (9) [http://www.statistics.gr/documents/20181/1515741/GreeceInFigures\\_2016Q3\\_EN.pdf/7e0fef2f-32f0-4492-8a45-b4a94ea144ee](http://www.statistics.gr/documents/20181/1515741/GreeceInFigures_2016Q3_EN.pdf/7e0fef2f-32f0-4492-8a45-b4a94ea144ee)
- (10) [http://ec.europa.eu/eurostat/statistics-explained/index.php/Income\\_distribution\\_statistics](http://ec.europa.eu/eurostat/statistics-explained/index.php/Income_distribution_statistics)
- (11) Rachiotis G, Stuckler D, McKee M, et al. What has happened to suicides during the Greek economic crisis? Findings from an ecological study of suicides and their determinants (2003-2012). *BMJ Open* 2015;5:e007295. doi: 10.1136/bmjopen-2014-00729 [accessed Dec 15, 2016]
- (12) <http://www.dw.com/en/greece-central-bank-reports-brain-drain-of-427000-young-educated-greeks-since-2008/a-19373527>
- (13) [http://www.keepeek.com/Digital-Asset-Management/oecd/social-issues-migration-health/international-migration-outlook-2016\\_migr\\_outlook-2016-en#page1](http://www.keepeek.com/Digital-Asset-Management/oecd/social-issues-migration-health/international-migration-outlook-2016_migr_outlook-2016-en#page1)
- (14) <http://ftp.iza.org/dp3754.pdf>
- (15) <http://www.kathimerini.gr/288633/article/epikairothta/ellada/o-xarths-twn-metanastwn-sthn-a8hna>
- (16) [http://www.keepeek.com/Digital-Asset-Management/oecd/social-issues-migration-health/international-migration-outlook-2016\\_migr\\_outlook-2016-en#page1](http://www.keepeek.com/Digital-Asset-Management/oecd/social-issues-migration-health/international-migration-outlook-2016_migr_outlook-2016-en#page1)
- (17) <http://data.unhcr.org/mediterranean/regional.php>
- (18) <http://diatrofi.prolepsis.gr/en/what-we-do/the-need.html>
- (19) <http://diatrofi.prolepsis.gr/en/what-we-do/the-need/food-insecurity.html>
- (20) <http://diatrofi.prolepsis.gr/en/what-we-do/what-we-do.html>
- (21) [http://www.nytimes.com/2015/07/12/world/europe/greece-debt-crisis-athens-poverty-inequality.html?\\_r=0](http://www.nytimes.com/2015/07/12/world/europe/greece-debt-crisis-athens-poverty-inequality.html?_r=0)
- (22) <http://www.nytimes.com/2016/06/01/opinion/yanis-varoufakis-greece-still-paying-for-europes-spite.html>
- (23) <http://www.sustainable-everyday-project.net/urbact-sustainable-food/2015/02/05/mayor-of-athens-announces-open-dialogue-for-a-sustainable-food-policy/>
- (24) [https://www.siemens.com/entry/cc/features/greencityindex\\_international/all/en/pdf/report\\_en.pdf](https://www.siemens.com/entry/cc/features/greencityindex_international/all/en/pdf/report_en.pdf)
- (25) <http://www.eea.europa.eu/publications/2599XXX/page018.html>
- (26) <http://point-topic.com/free-analysis/mapping-broadband-coverage-in-greece/>
- (27) [https://eu-smartcities.eu/commitments?field\\_event\\_city\\_tid=4280](https://eu-smartcities.eu/commitments?field_event_city_tid=4280)
- (28) <http://buildinggreenexpo.gr/en/>
- (29) <http://www.synathina.gr/el/>
- (30) <http://www.eu-startups.com/2016/02/10-greek-startups-to-look-out-for-in-2016/>



# BARCELONA



Barcelona is ranked 6th in the SHARECITY100 Database of global ICT-mediated food sharing, with 106 initiatives currently active in the city.

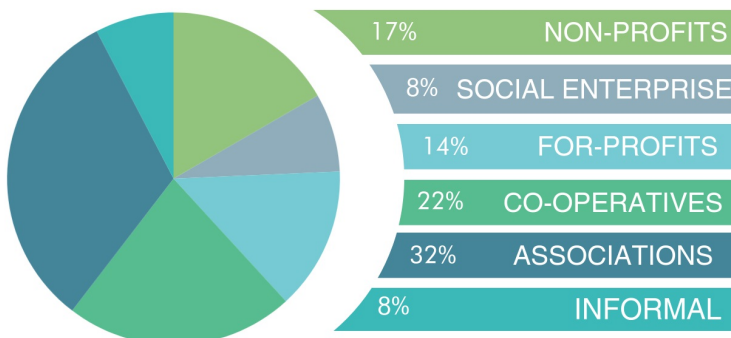
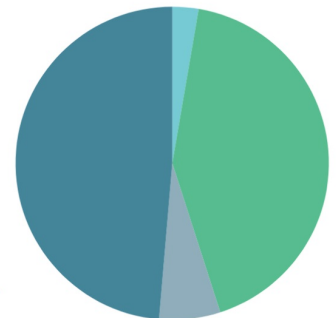
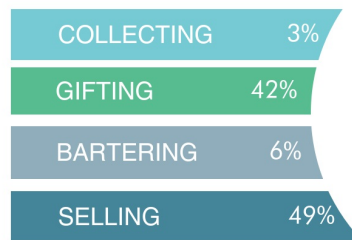


## WHAT IS SHARED

77% of food sharing initiatives in Barcelona share multiple things. Knowledge and skills are most frequently shared, followed by food (including fruits, vegetables, meat, fish and food products) and then meals. Compost, then plants and seeds, and tools are least shared in Barcelona.

## HOW IT IS SHARED

Selling is the most common form of food sharing in Barcelona, followed closely by gifting. Collecting and bartering are relatively infrequent modes of exchange. Only 8% of initiatives share via multiple methods, the most common combination being gifting and selling.



## SHARING ORGANISATION

Associations (including clubs and networks) are the most common form of food sharing enterprise in Barcelona, followed by co-operatives, and nonprofits (including charities). Few initiatives are social enterprises or informal groups. 32% of Barcelona initiatives use more than one form of organisation in their operations.





---

## GEOGRAPHY & POLITICS

---



Barcelona is Spain's second largest city located along the Mediterranean coast in north eastern Spain. It has a population of 1.7 million people and a population density of 16,000 people per square kilometre, increasing to a population of 3.2 million people in the wider metropolitan area. This makes Barcelona one of Europe's most densely populated cities. Spain consists of seventeen autonomous communities and two autonomous cities. Barcelona is the capital city of the autonomous community of Catalonia. The Catalan region represents 16% of Spain's total population (1).

The Kingdom of Spain is a hereditary monarchy with a democratic parliament that is ruled by King Felipe VI. The government is divided into legislative, executive and judicial sectors with elections held every four years. There is currently a strong independence movement in Catalonia and Barcelona. Following General Franco's death in 1975, the Catalan language and culture is being revived and celebrated. Catalonia now has its own parliament and executive with extensive autonomy. Barcelona is the seat of the Catalan government and is governed by a city council elected for a four-year term (2).

---

## ECONOMY & SOCIETY

---

Barcelona is considered a global city. It represents the major Mediterranean seaport for Spain, and is a centre of commerce, tourism, art, architecture, sports, science, and culture. Barcelona is ranked 39 in the 2016 Mercer Global Liveability Ranking (3).

The Autonomous Region of Catalonia contributes nearly 19% to Spain's total GDP. Catalonia has a diversified economy that includes tertiary (67%), manufacturing (26%), construction (10%), and agriculture (2%). Barcelona has a high level of cultural diversity with 17% of its residents born abroad, with immigration a key driver for recent economic and population growth (4). New arrivals to Catalonia (from highest to least) are from South America, the European Union, Asia and Oceania, Africa, and North and Central America (5).

Since 2008, Barcelona has suffered from economic austerity and uncertainty due to the global economic crisis. There have been declines in both employment and GDP per capita. In 2016 Spain's unemployment rate fell to its lowest level in six years with an unemployment rate of 19.7% while more than 20% of people live below the poverty line (2012) (6) (7).



# FOOD, ENVIRONMENT & SUSTAINABILITY



Barcelona is striving to be both a sustainable and socially just city, including an initiative to transform vacant plots into vibrant spaces, and a Green Infrastructure and Biodiversity Plan 2020 (8). There are aspirations to make the municipality wants to become the capital of the solidarity economy with already some 5,000 enterprises employing approximately 8% of citizens in Barcelona (9). Barcelona is a signatory of both the United Nation's Global Compact Cities Programme and the Milan Urban Food Policy Pact.

The Catalanian culture has a rich history of cooperatives, collectives, alternative economies, and commons (10). 1,700 families participate in 59 agro-ecological cooperatives in the city, with the most cooperatives found in Gracia with 12 initiatives (20%). Between 2013 and 2015 the number of cooperatives grew by 47.5% (11). Barcelona is also home to Fab Labs (including the Green Fab Lab) and participates in the Maker Spacer movement.

Cultural terms that refer to food sharing include: 'sobremesa', to acknowledge the time spent after a meal enjoying each other's company, and 'porrón', a traditional drinking vessel that is passed around from person-to-person, creating a sense of cohesion and equality that is considered a 'a symbol of our land' (12).

## TECHNOLOGY

Barcelona is described as an upcoming digital innovation hub of Europe. Since 2011 Barcelona has been considered one of Europe's leading smart cities. Barcelona is striving to become a creative city.

Barcelona's citizens are highly connected to the internet, but with differences occurring across suburbs, income, age, and educational level. On average 84% of residents have internet access at home and more than 85% of residents are online every day (12).



CITATION: Please cite as: Davies et al (2017) Barcelona SHARECITY Profile, Trinity College Dublin, Ireland

ACKNOWLEDGEMENT: SHARECITY is funded by the European Research Council (ERC) under the European Union's Horizon 2020 Research and Innovation programme (Grant Agreement No. 646883).

## REFERENCES:

---

- (1) <http://www.amb.cat/en/web/area-metropolitana/coneixer-l-area-metropolitana/poblacio>
- (2) <http://www.bbc.co.uk/news/world-europe-20345071>
- (3) <http://www.barcelonaglobal.com/why-barcelona/city-rankings>
- (4) <http://worldpopulationreview.com/world-cities/barcelona-population/>
- (5) <http://www.amb.cat/en/web/area-metropolitana/coneixer-l-area-metropolitana/poblacio>
- (6) [http://elpais.com/elpais/2016/07/28/inenglish/1469692385\\_289216.html](http://elpais.com/elpais/2016/07/28/inenglish/1469692385_289216.html)
- (7) CIA Report
- (8) <http://ajuntament.barcelona.cat/ecologiaurbana/en/what-we-do-and-why/green-city-and-biodiversity/green-and-biodiversity-plan>
- (9) <http://www.ripess.eu/barcelona-capital-city-of-solidarity-economy/>
- (10) <http://www.20minutos.es/noticia/2695381/0/cooperativas-ecologicas/barcelona-familias/consumo-alternativo-agroalimentario/>
- (11) 8/29/2016 1.700 familias se autoabastecen en Barcelona mediante 59 grupos de consumo agroecológico - 20minutos.es
- (12) <https://www.theguardian.com/technology/2016/aug/15/spain-cultural-group-petition-whatsapp-create-porrn-emoji>
- (13) The Digital Divide in the City of Barcelona.



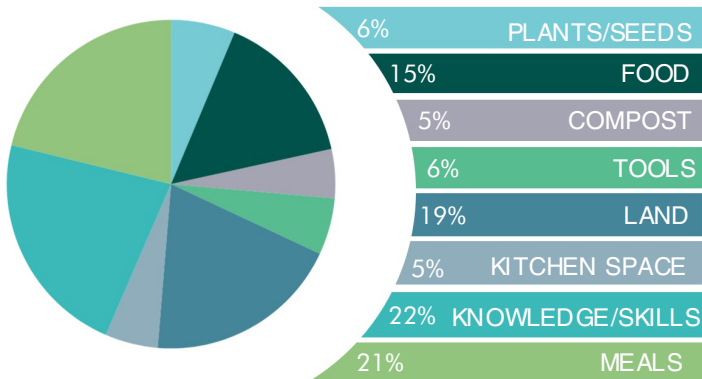
# BERLIN



Berlin is ranked 4th in the SHARECITY100 Database of global ICT-mediated food sharing, with 133 initiatives currently active in the city.



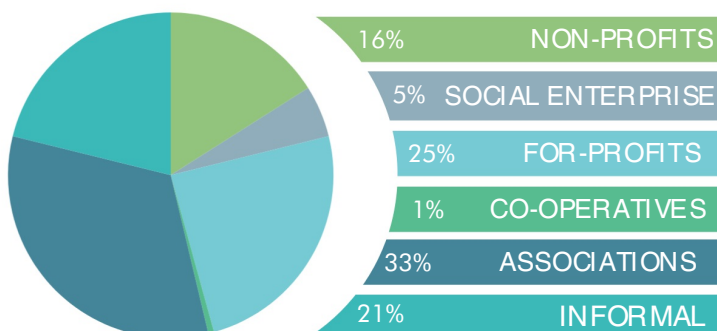
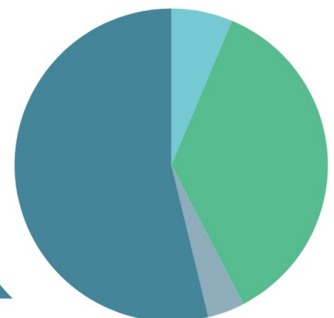
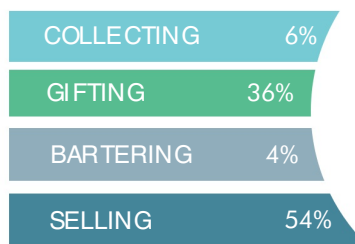
## WHAT IS SHARED



67% of Berlin food sharing initiatives share multiple things. Knowledge and skills are most frequently shared, making up 22% of all sharing, followed by meals and food (including fruits, vegetables, meat, fish and food products not combined and prepared into a meal). Kitchen space and devices are least shared in Berlin.

## HOW IT IS SHARED

Selling is the most common form of food sharing in Berlin, followed by gifting. Collecting and bartering occur relatively infrequently. Only 17% of initiatives use multiple methods to share, the most common combinations being gifting and collecting, and gifting and selling.



## SHARING ORGANISATION

Associations (including clubs and networks) are the most frequent organisational structures employed by food sharing initiatives in Berlin, followed by for-profit enterprises. Co-operatives make up only 1% of food sharing activities. 23% of Berlin initiatives use more than one organisational structure.



## GEOGRAPHY & POLITICS



Berlin is the Capital and most populous city of Germany. The City-State is located in north-eastern Germany at the heart of the Berlin-Brandenburg region. Berlin has twelve boroughs (Bezirke), each of which is governed by a council that is elected by a borough assembly. The borough council of mayors advises the Berlin Senate, which consists of a Governing Mayor, and up to eight senators including the Deputy Mayor (1). It is governed by a newly elected Red-Red-Green coalition, consisting of members of SPD, the Left, and the Greens.

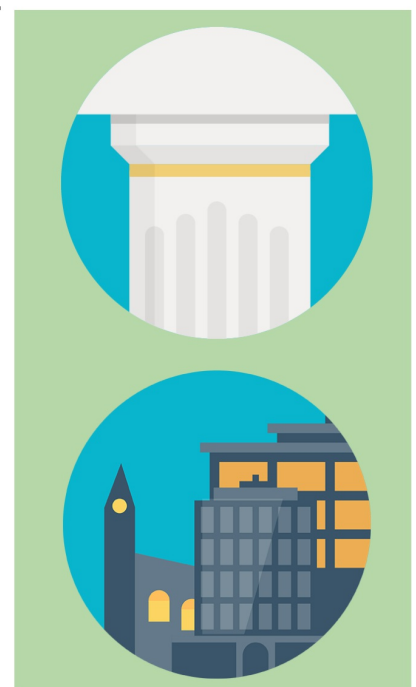
The coalition government has pledged to improve the quality of life for Berliners by investing in social and environmental infrastructure such as housing, green infrastructure, and urban gardens (2)(3). As the capital city, Berlin also hosts the President, the executive, the chancellery, the Bundestag/Parliament, The Bundesrat/Federal Council, and the House of Representatives. The City has a landmass of 892 square kilometres, a population of 3.5 million, and a density of 3,891.3 residents per square kilometre (4).

## ECONOMY & SOCIETY

Berlin is an international hub for IT, creative industries, technology, life sciences, pharmaceuticals, tourism, services, and politics, and it ranks 16th in the 2016 Global City Index (5). With rates twice the national average, Berlin has become attractive for Foreign Direct Investment, particularly in the area of real estate (6). The City of Berlin also carries high levels of debt, and servicing these debts consumes more than 20% of tax revenue each year (7).

In January 2016 the unemployment rate was 10.7% (8). With 44,000 new businesses each year, Berlin is also a highly entrepreneurial city (9). Berlin's relatively low cost of living, high quality of life, and excellent infrastructure have made it attractive to artists, activists, and entrepreneurs alike. However, foreign investment and the privatization of social housing have led to a housing crisis (10). In response Berlin has taken steps to regulate the sharing economy and fend off developers (11).

The city has attracted 1.7 million new residents from 190 different countries over the last twenty years, and in 2015 15.5% of the population were foreign citizens (12). A higher percentage have a migration background, meaning they or one of their parents immigrated to Germany. The majority of immigrants come from Turkey and Poland (13). In 2015, Berlin welcomed 80,000 refugees from Syria, Iraq, Afghanistan, and other countries (14). Berlin is among the top five family-friendly cities in Europe (15). However, in 2015 it was reported that one in every five Berliners experienced poverty, with higher rates among migrants (16).



# FOOD, ENVIRONMENT & SUSTAINABILITY



Berlin is a green city. It ranks 17th in the 2016 Arcadis Sustainable Cities Index (17) and 8th in the European Green Cities index (18). The city supports a diversity of land uses, including forests (18%), recreation (12%), and agriculture (4%) (19). It is home to hundreds of allotment and urban gardens, and more than 2,500 open green spaces (20). Berlin has also become a leader in promoting innovation through temporary use (21), and it continues to make “green in the city” a policy and planning priority thanks to the political engagement of its citizens (22)(23). Berlin has ambitious sustainability goals, which include becoming carbon neutral by 2050, and powering one third of all vehicles with renewable fuels by 2030.

The city has a well-developed waste infrastructure, and of the 1.28 million tonnes of waste produced in 2015 by Berlin households 25% was recyclable, 11% was compostable, and 64% was waste. Municipal composting is widely available and in 2015 the City collected 143,680 tonnes of organic waste. Much of this waste is processed into fuel at the City’s biogas fermentation plant (25). Legislation is in place at the European Union, federal, state, and city level to promote closed-loop waste management. By 2020, 65% of domestic waste and 70% of construction and demolition waste will be recycled (25).

Berlin is a signatory on the Milan Urban Food Policy Pact, and has an active citizen led Food Policy Council. The new Red-Red-Green coalition city government has pledged to make Berlin an edible city by supporting community and intercultural gardening (26).

## TECHNOLOGY

Berlin has high rates of internet connectivity, with 90.1% coverage, it has the largest broadband distribution grid and digital communication network in Germany. It is home to some 9,700 IT companies (27). In addition to providing more than 800 public LAN (Local Area Network) connections (28), the city is also home to Berlin Freie Funk, a grassroots ICT movement distributing free networks, democratizing media and communication, and promoting local social structures. The movement aims to bridge the digital divide, share data, build social capital, and establish free and independent neighbourhood network infrastructures (29).



CITATION: Please cite as: Davies et al (2017) Berlin SHARECITY Profile, Trinity College Dublin, Ireland

ACKNOWLEDGEMENT: SHARECITY is funded by the European Research Council (ERC) under the European Union’s Horizon 2020 Research and Innovation programme (Grant Agreement No. 646883).

## REFERENCES:

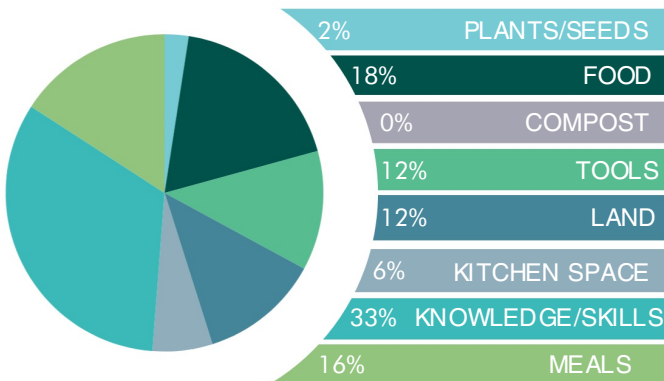
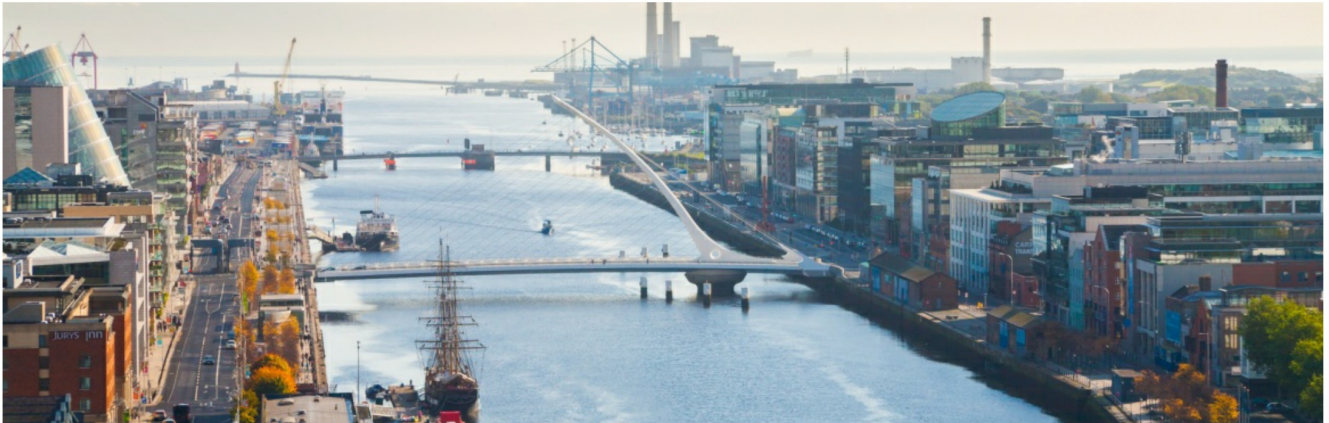
---

- (1) [https://en.wikipedia.org/wiki/Politics\\_of\\_Berlin](https://en.wikipedia.org/wiki/Politics_of_Berlin)
- (2) [https://gruene.berlin/sites/gruene.berlin/files/2016-11-16-koalitionsvereinbarung\\_2016-21\\_final\\_0.pdf](https://gruene.berlin/sites/gruene.berlin/files/2016-11-16-koalitionsvereinbarung_2016-21_final_0.pdf)
- (3) <http://www.tagesspiegel.de/berlin/koalitionsverhandlungen-in-berlin-rot-rot-gruen-einigen-sich-auf-mehr-parks-und-den-ausstieg-aus-der-kohle/14798966.html>
- (4) [https://www.statistik-berlin-brandenburg.de/produkte/kleinstatistik/AP\\_KleineStatistik\\_EN\\_2015\\_BE.pdf](https://www.statistik-berlin-brandenburg.de/produkte/kleinstatistik/AP_KleineStatistik_EN_2015_BE.pdf)
- (5) <https://www.atkearney.com/documents/10192/8178456/Global+Cities+2016.pdf/8139cd44-c760-4a93-ad7d-11c5d347451a>
- (6) [https://www.businesslocationcenter.de/imperia/md/content/blc/broschueren/english/bp\\_investberlin\\_en.pdf](https://www.businesslocationcenter.de/imperia/md/content/blc/broschueren/english/bp_investberlin_en.pdf)
- (7) [https://www.siemens.com/entry/cc/features/greencityindex\\_international/all/en/pdf/report\\_en.pdf](https://www.siemens.com/entry/cc/features/greencityindex_international/all/en/pdf/report_en.pdf)
- (8) <https://ec.europa.eu/eures/main.jsp?countryId=DE&acro=Imi&showRegion=true&lang=en&mode=text&regionId=DE0&nuts2Code=%20&nuts3Code=null&catId=375>
- (9) [https://www.businesslocationcenter.de/imperia/md/content/blc/broschueren/english/bp\\_investberlin\\_en.pdf](https://www.businesslocationcenter.de/imperia/md/content/blc/broschueren/english/bp_investberlin_en.pdf)
- (10) <https://www.theguardian.com/housing-network/2016/mar/14/property-developers-berlin-council-social-housing>
- (11) <https://www.theguardian.com/technology/2016/jun/08/berlin-ban-airbnb-short-term-rentals-upheld-city-court>
- (12) [http://www.statistikportal.de/Statistik-Portal/de\\_jb01\\_jahrta2.asp](http://www.statistikportal.de/Statistik-Portal/de_jb01_jahrta2.asp)
- (13) <https://www.statistik-berlin-brandenburg.de/grundlagen/zensus.asp?Ptyp=50&Sageb=100&creg=BBB&anzwer=0>
- (14) <https://www.berlin.de/fluechtlinge/>
- (15) [https://www.businesslocationcenter.de/imperia/md/content/blc/broschueren/english/bp\\_investberlin\\_en.pdf](https://www.businesslocationcenter.de/imperia/md/content/blc/broschueren/english/bp_investberlin_en.pdf)
- (16) <http://www.tagesspiegel.de/berlin/neuer-bericht-jeder-fuenfte-berliner-lebt-in-armut/14468408.html>
- (17) <https://www.arcadis.com/media/0/6/6/%7B06687980-3179-47AD-89FD-F6AFA76EBB73%7DSustainable%20Cities%20Index%202016%20Global%20Web.pdf>
- (18) [https://www.siemens.com/entry/cc/features/greencityindex\\_international/all/en/pdf/report\\_en.pdf](https://www.siemens.com/entry/cc/features/greencityindex_international/all/en/pdf/report_en.pdf)
- (19) [https://www.statistik-berlin-brandenburg.de/produkte/kleinstatistik/AP\\_KleineStatistik\\_EN\\_2015\\_BE.pdf](https://www.statistik-berlin-brandenburg.de/produkte/kleinstatistik/AP_KleineStatistik_EN_2015_BE.pdf)
- (20) <http://www.visitberlin.de/de/sehen/sightseeing/parks-gaerten>
- (21) Oswald, P. Overmeyer, K., & Misselwitz, P. 2013. Urban Catalyst: The Power of Temporary Use. Dom Publishing
- (22) <https://www.gruen-in-der-stadt.de/bibliothek>
- (23) <http://www.thf100.de/start.html>
- (24) <http://trennstadt-berlin.de/biogut/>
- (25) [http://www.stadtentwicklung.berlin.de/umwelt/abfallwirtschaft/downloads/siedlungsabfall/Abfall\\_Broschuerengl.pdf](http://www.stadtentwicklung.berlin.de/umwelt/abfallwirtschaft/downloads/siedlungsabfall/Abfall_Broschuerengl.pdf)
- (26) [https://gruene.berlin/sites/gruene.berlin/files/2016-11-16-koalitionsvereinbarung\\_2016-21\\_final\\_0.pdf](https://gruene.berlin/sites/gruene.berlin/files/2016-11-16-koalitionsvereinbarung_2016-21_final_0.pdf)
- (27) <http://www.businesslocationcenter.de/ict>
- (28) <http://www.businesslocationcenter.de/en/business-location/industry-information/ict-media-and-creative-industries/information-and-communications-technology/facts-and-figures>  
[https://berlin.freifunk.net/index\\_en/](https://berlin.freifunk.net/index_en/)



# DUBLIN

Dublin is ranked 32nd in the SHARECITY100 Database of global ICT-mediated food sharing, with 44 initiatives currently active in the city.

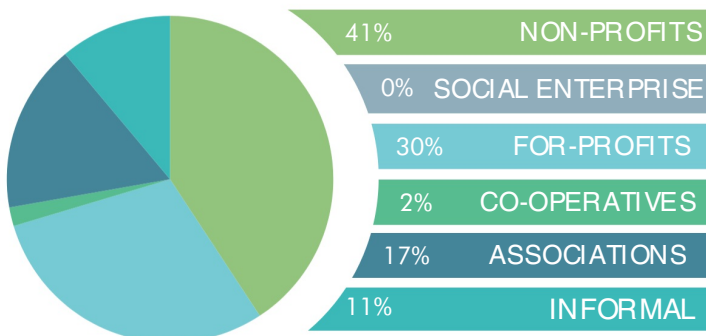
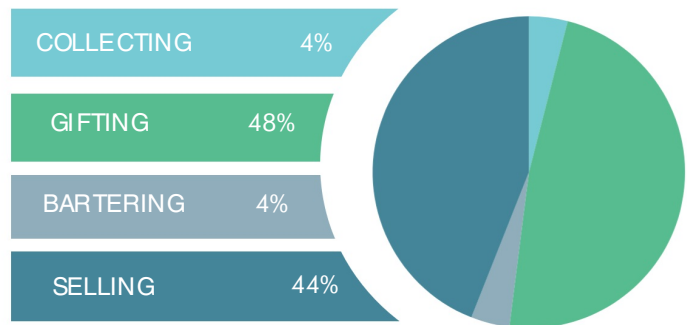


## WHAT IS SHARED

73% of food sharing initiatives in Dublin share multiple things. Knowledge and skills are most commonly shared by Dublin food sharing initiatives, followed by food (including fruit, vegetables, meat, fish and food products not combined into a meal) and meals. Compost, and plants and seeds are shared least in Dublin.

## HOW IT IS SHARED

Gifting is the most common form of exchange across food sharing initiatives in Dublin, accounting for almost half of all exchanges of stuff, spaces and skills, followed closely by selling. Collecting and bartering are relatively infrequent. 18% of initiatives use more than one form of exchange in their operations.



## SHARING ORGANISATION

Non profits and charities are the dominant model of food sharing initiative in Dublin, followed by for-profit enterprises, and associations (including clubs and networks). Social enterprise and co-operative models are the least used organisational structures by initiatives who gift food and food related stuff, spaces and skills.





---

## GEOGRAPHY & POLITICS

---



Dublin is the capital and largest city of Ireland, a member state of the European Union located in North-western Europe. It is situated in the county of Dublin on the Ireland's east coast, sitting at the mouth of the River Liffey. The Dublin metropolitan area is home to 1.24 million people, roughly one third of the country's population, and is the commercial and cultural centre of the country.

The Republic of Ireland was established in 1922 and it joined the European Economic Community (predecessor of the European Union) in 1973. Ireland is a parliamentary democracy, with the National Parliament (the Oireachtas) consisting of the President and two Houses: Dáil Éireann (House of Representatives) whose members are elected directly by the people every five years, and Seanad Éireann (the Senate) who are elected by the head of government, national universities and vocational panels. The President of Ireland serves largely as a ceremonial head of state and is elected through a general election. The head of government is the Taoiseach (Prime Minister) who is nominated by the Dáil. Local issues regarding the city of Dublin are administered by the Dublin City Council who are responsible for passing annual budgets for spending in areas such as housing, traffic management, refuse, draining and planning (1). The chairperson of Dublin City Council is the Lord Mayor, though executive power is held by the chief executive of the council.

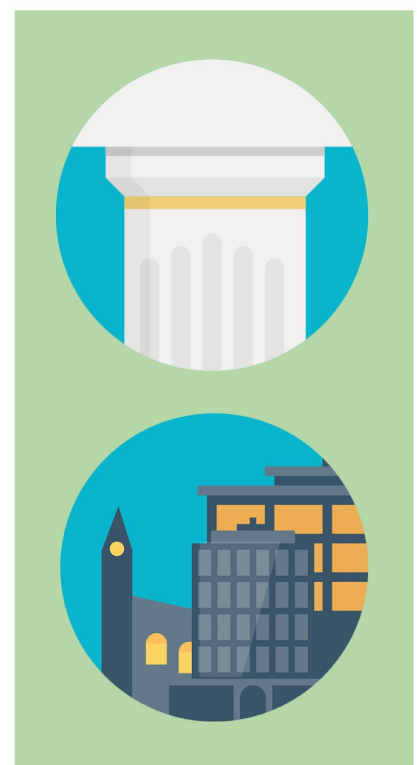
---

## ECONOMY & SOCIETY

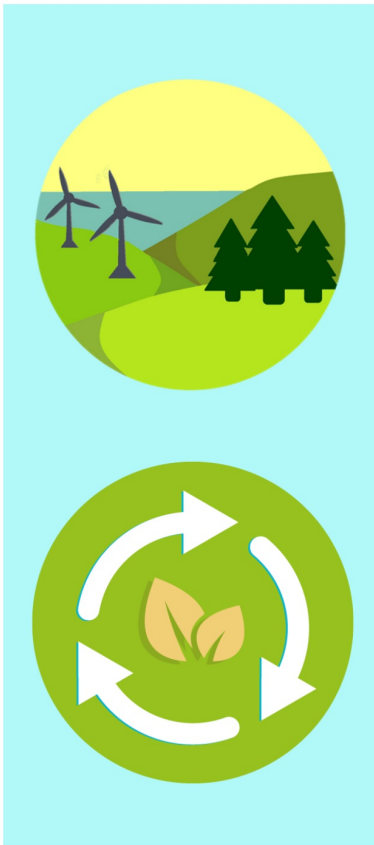
---

Dublin has a modern knowledge economy with a focus on high technology and innovative industries and services. As the economic centre of Ireland, Dublin experienced rapid growth, expansion and foreign investment during the mid-1990s to the mid-2000s, an economic period dubbed the 'Celtic Tiger'. In 2008 the Irish economy was hit particularly hard by the global economic crisis and collapse of the property market, with unemployment rising to 15% in 2012 (2). Ireland's economy has been improving since 2014, and its tax system, young and highly educated workforce and strategic location between the US and Europe have made it a prime location for the European headquarters of global companies. Dublin is now home to a number of global pharmaceutical and information and communications technology companies, having attracted large multinationals such as Google, Amazon, eBay, Facebook, and Pfizer to establish operational bases in the city.

Though currently ranked 48th in the Global Cities Index (current performance), Dublin is ranked 28th for Global Outlook (future potential) (3). Since the late 1990s the city has experienced a high level of net immigration, with students and professionals coming from the European Union and countries such as China, India, Pakistan and Nigeria. Today one fifth of the city's population was born outside of the country. Although affordability pressures have always been greater in Dublin than the national average, the growing population, recovering economy and lack of development since 2008 has led to rapid increases in housing prices and rental costs, and a growing homeless population (4). Up to 15% of the city's population does not have access to an adequate and nutritious diet (5). In 2016 Dublin was identified as having the 24th highest cost of living across global cities, however in 2015 it scored in the top 10 European capital Cities for overall resident satisfaction (6).



# FOOD, ENVIRONMENT & SUSTAINABILITY



The Irish food and drink industry is Ireland's most important indigenous sector, with an annual turnover of €24 billion and accounting for two thirds of all indigenous exports (7). Following in the footsteps of larger and higher ranking cities in the SHARECITY100 database, such as London, New York and Berlin, Dublin has a growing number of multicultural eateries, supper clubs and private dining events, food trucks and farmer's markets. The new City Development Plan has a number of positive policies for Dublin's food sector including the promotion of outdoor markets and market streets (8).

Many traditional commercial food industries such as processing, brewing and distilling have declined in the city as employment focuses on the service sectors, and commercial agriculture remains largely segregated from urban areas. Outside the city, Ireland's agri-food industry is primarily focussed on meat, dairy and grain production, with strategic plans favouring sustainable intensification and a technological focus. The wider county of Dublin is a particularly fertile region, and the 800 farms in operation account for one fifth of the total economic contribution to agri-food nationally. Fishing is also a substantial food industry in Dublin, with Howth being one of six national Fishery Harbour Centres. Ultimately Ireland's food and agricultural sector will play a key role in reducing carbon emissions, tackling environmental change and building a sustainable economy.

A 2016 study of sustainable cities ranked Dublin 35th out of 100 global cities (9) and in the 2009 European Green City Index Dublin ranked 21 out of 30 cities (10). Though scoring highly in air quality, ranking 4th overall, it performed poorly in other categories including buildings, carbon dioxide emissions, transport and environmental governance. The vast majority of Ireland's energy comes from fossil fuels, making up 90% of the current energy profile. The city has initiated a number of schemes to reduce energy emissions and increase sustainability, such as a successful public bikes scheme, tax incentives for bicycle commuting, and the extension of public transport routes, all of which aim to decrease personal car usage (11).

## TECHNOLOGY

Dublin has recently become a centre of attention for the technology world with many of the leading software, internet and social media firms having bases there (including Microsoft, Intel, Facebook, Google, Twitter, Amazon, and eBay), and the city hosting the international web summit in 2013. Despite this connection speeds in Ireland and Dublin continue to lag behind the rest of the developed world and EU average, only ranking 46th in an international context (12). Currently there is no free public Wi-Fi service available in Dublin.



CITATION: Please cite as: Davies et al (2017) Dublin SHARECITY Profile, Trinity College Dublin, Ireland

ACKNOWLEDGEMENT: SHARECITY is funded by the European Research Council (ERC) under the European Union's Horizon 2020 Research and Innovation programme (Grant Agreement No. 646883).

## REFERENCES:

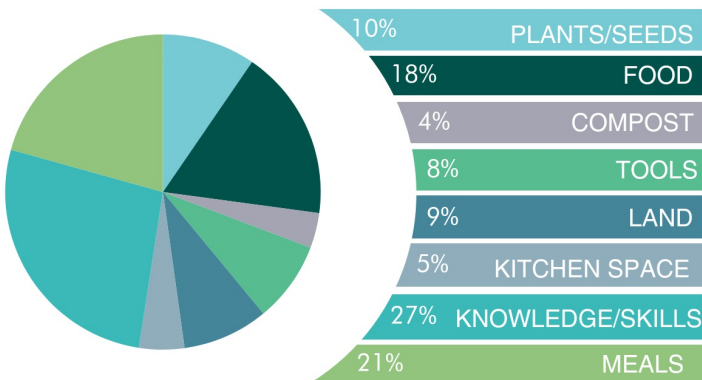
---

- (1) <http://www.dublincity.ie/>
- (2) Source: Quarterly National Household Survey, Central Statistics Office
- (3) <https://www.atkearney.com/documents/10192/8178456/Global+Cities+2016.pdf/8139cd44-c760-4a93-ad7d-11c5d347451a>
- (4) <http://www.dubsimon.ie/Homelessness/HomelessStatistics/DublinStatistics.aspx>
- (5) [https://www.dublincity.ie/sites/default/files/content/Planning/EconomicDevelopment/Documents/food\\_and\\_city\\_final\\_april.pdf](https://www.dublincity.ie/sites/default/files/content/Planning/EconomicDevelopment/Documents/food_and_city_final_april.pdf)
- (6) [http://ec.europa.eu/regional\\_policy/sources/docgener/studies/pdf/urban/survey2015\\_en.pdf](http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/urban/survey2015_en.pdf)
- (7) [https://www.dublincity.ie/sites/default/files/content/Planning/EconomicDevelopment/Documents/food\\_and\\_city\\_final\\_april.pdf](https://www.dublincity.ie/sites/default/files/content/Planning/EconomicDevelopment/Documents/food_and_city_final_april.pdf)
- (8) [https://www.dublincity.ie/sites/default/files/content/Planning/EconomicDevelopment/Documents/food\\_and\\_city\\_final\\_april.pdf](https://www.dublincity.ie/sites/default/files/content/Planning/EconomicDevelopment/Documents/food_and_city_final_april.pdf)
- (9) <https://www.arcadis.com/media/0/6/6/%7B06687980-3179-47AD-89FD-F6AFA76EBB73%7DSustainable%20Cities%20Index%202016%20Global%20Web.pdf>
- (10) [https://www.siemens.com/entry/cc/features/greencityindex\\_international/all/en/pdf/report\\_en.pdf](https://www.siemens.com/entry/cc/features/greencityindex_international/all/en/pdf/report_en.pdf)
- (11) <http://www.dublincity.ie/sites/default/files/content/YourCouncil/CouncilPublications/Documents/SustainabilityReport2013.pdf>
- (12) <https://www.akamai.com/us/en/multimedia/documents/report/q3-2015-soti-connectivity-final.pdf>

# LONDON



London is ranked 1st in the SHARECITY100 Database of global ICT-mediated food sharing, with 198 initiatives currently active in the city.

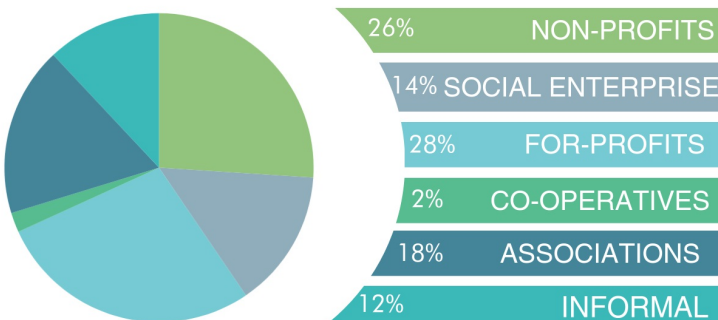
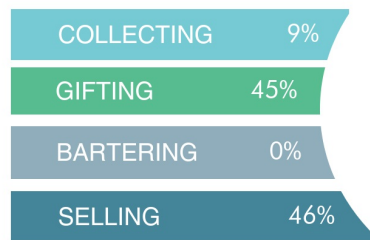


## WHAT IS SHARED

69% of London food sharing initiatives share multiple things. Knowledge and skills are most frequently shared, making up 27% of all sharing, followed by meals and food (including fruits, vegetables, meat, fish and food products). Compost, and kitchen space and devices are least shared in London.

## HOW IT IS SHARED

Selling is the most common form of food sharing in London, followed closely by gifting. No food sharing initiatives were found to use bartering as a form of exchange. 25% of initiatives share via multiple methods, the most common combination being gifting and selling.



## SHARING ORGANISATION

For-profit enterprises are the leading organisational models of food sharing enterprises in London followed closely by non-profits (including charities). Very few initiatives were structured as co-operatives. 23 % of London initiatives adopt more than one organisational structure.



## GEOGRAPHY & POLITICS



London is the capital of England and the United Kingdom, and is located on the river Thames in the south east of Great Britain. With almost 9 million people living in Greater London, it has the largest urban area in Europe and it is the most populous European city (1) (2).

At city level London is governed by the Greater London Authority (GLA), constituted by the Mayor of London and the London Assembly, which is composed by 25 members elected by London residents. The GLA is responsible for city policies and strategies in a wide range of fields, such as arts and culture, business and economy, transport, communities, education and youth, environment, health, housing and land, policing, planning, regeneration, sports, and volunteering. The GLA has embraced a policy of transparency and accountability, and it aims to increase the level of citizen participation by holding public consultations on specific urban issues such as traffic or pollution.

At local level London is divided in 32 boroughs and the City of London. Twelve boroughs are located in Inner London and 20 are in Outer London (3). The London borough councils provide local services such as waste management and recycling, Council Tax collection, housing and planning applications, and local road maintenance (4).

## ECONOMY & SOCIETY

London is undoubtedly regarded as one of the world's most powerful financial centres, and it currently ranks 1st in the Global City Index (5). The City of London, the financial district and the historic centre of London are run by the City of London Corporation. Despite having a resident population of less than 8,000 inhabitants, over 400,000 people commute into the City of London every day to work for one of the 15,105 enterprises located in this international business hub (5). London ultimately contributes one fifth to the total tax revenue of the UK, generated not only by the banking, insurance and financial sectors, but also by other major industries such as property, technology, electronics, digital, media, construction, manufacturing, retail, fashion, and culture (6).

Despite positive economic indicators such as a drop in unemployment from 9.2% in 2013 to 5.6% in 2016 (7), one in five jobs currently pay below the London Living Wage (8). These low incomes coupled with high housing costs mean that the poverty rate for families in London remains higher than for any other region (9) in the UK, with a 2016 report finding that 110,000 food aid packages were handed out by London based food banks in 2015, and that 9% of children in London sometimes or often go to bed hungry (10). The United Nation's Committee on Economic, Social and Cultural Rights expressed its concern regarding the UK government's austerity measures and social security reform, considering them in breach of their obligations to human rights (11). According to World Culture Forum, London's cultural life is also threatened by the dramatically increased property prices (12).

London boasts a great cultural diversity, with over one third of residents being non-nationals (13) and approximately 300 languages spoken in the city (14). However, since the results of the referendum on EU membership in June 2016 the social, economic and political landscape of London has been facing a phase of profound uncertainty. Although the referendum to leave the EU was passed with 52% of the national vote, 60% of Londoners voted to remain.



# FOOD, ENVIRONMENT & SUSTAINABILITY



London is one of the greenest cities in the world (15) and has fostered innumerable projects from food growing networks to biodiversity conservation (16). The Mayor of London signed Milan Urban Food Policy Pact in 2015, and the city has been pioneering strategies for feeding its urban residents in a sustainable and healthy way, especially since the establishment of the London Food Board, a commission of experts whose purpose is to advise the Mayor on food issues in the capital, in 2004 (17). City government and local councils have also partnered with charities in the food sector to develop synergies and campaigns, such as 'Good Food for London' which addresses urban challenges such as food poverty, healthy food access, food growing, and school meals (18). Many initiatives in London are addressing food poverty and food waste, including London based charity Feedback (19) who pioneered Feeding the 5000 in Trafalgar Square in 2009, a milestone in the global fight against food waste (20).

London ranks 11th in Siemens' European Green City Index, which assessed 30 leading European cities across a wide range of environmental indicators (21). The London Sustainable Development Commission was established in 2002 and played a fundamental role in ensuring minimal environmental impact during the London 2012 Olympic and Paralympic Games. The Commission promotes circular economies, green economies, and energy efficiency, and provides advice directly to the Mayor of London on matters of urban sustainability (22). In collaboration with Lisbon and Milan, the London municipality received €25m European funding for "Sharing Cities", a project aiming to the use of smart cities technology for improving air quality (23). According to the GLA (Greater London Authority) roughly 10,000 Londoners die from long-term exposure to air pollution every year and many schools in London are in areas exceeding safe air quality levels (24).

## TECHNOLOGY

High-tech initiatives and start-ups have recently flourished in East London, so much so that the areas around Old Street roundabout earned the nickname of 'Silicon Roundabout' (25). Many international companies have invested in the area, including Google for Entrepreneurs who opened "Campus London", an innovation hub with a member's café and co-working space for facilitating collaboration between start-ups and tech companies (26). Additionally, Tech.London was set up by the Mayor of London in collaboration with IBM and Gust in order to support new technology business (27).



CITATION: Please cite as: Davies et al (2017) London SHARECITY Profile, Trinity College Dublin, Ireland

ACKNOWLEDGEMENT: SHARECITY is funded by the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (Grant Agreement No. 646883).

## REFERENCES:

---

- (1) <http://foodsecurityindex.eiu.com/Country/Details#United%20Kingdom>
- (2) [http://ec.europa.eu/eurostat/statistics-explained/index.php/Statistics\\_on\\_European\\_cities](http://ec.europa.eu/eurostat/statistics-explained/index.php/Statistics_on_European_cities)
- (3) <http://www.londoncouncils.gov.uk/node/1938>
- (4) <https://www.gov.uk/understand-how-your-council-works/types-of-council>
- (5) <https://www.atkearney.com/documents/10192/8178456/Global+Cities+2016.pdf/8139cd44-c760-4a93-ad7d-11c5d347451a>
- (6) <https://www.cityoflondon.gov.uk/things-to-do/visit-the-city/our-history/Pages/timeline.aspx>
- (7) <https://www.cityoflondon.gov.uk/about-the-city/about-us/Pages/key-facts.aspx>
- (8) <http://www.uncsbrp.org/>
- (9) <https://www.london.gov.uk/what-we-do/arts-and-culture/vision-and-strategy/20-facts-about-london%E2%80%99s-culture>
- (10) <https://files.datapress.com/london/dataset/london--country-of-birth-estimates--2004-2013-/2015-09-23T12:22:38/Update-09-2015-country-of-birth-2004-2014-london.pdf>
- (11) <https://data.london.gov.uk/dataset/unemployment-rate-region/resource/8a29ec0c-9de3-4777-832f-49ef8c2b4d14#>
- (12) <https://www.sustainweb.org/secure/BeyondTheFoodBank2016.pdf>
- (13) [https://www.london.gov.uk/sites/default/files/gla\\_migrate\\_files\\_destination/A%20Zero%20Hunger%20City.doc.pdf](https://www.london.gov.uk/sites/default/files/gla_migrate_files_destination/A%20Zero%20Hunger%20City.doc.pdf)
- (14) <https://www.sustainweb.org/secure/BeyondTheFoodBank2016.pdf>
- (15) <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G16/152/41/PDF/G1615241.pdf?OpenElement>
- (16) <http://www.worldcitiescultureforum.com/cities/london>
- (17) <https://www.london.gov.uk/WHAT-WE-DO/environment/parks-green-spaces-and-biodiversity/trees-and-woodlands>
- (18) <http://www.capitalgrowth.org/>
- (19) <http://www.gigl.org.uk/about-gigl/londons-biodiversity-action-plan/>
- (20) <https://www.london.gov.uk/what-we-do/business-and-economy/food/london-food-board>
- (21) <https://www.sustainweb.org/londonfoodlink/goodfoodforlondon/>
- (22) <http://feedbackglobal.org/campaigns/feeding-the-5000/>
- (23) [http://www.siemens.com/entry/cc/features/greencityindex\\_international/all/en/pdf/report\\_en.pdf](http://www.siemens.com/entry/cc/features/greencityindex_international/all/en/pdf/report_en.pdf)
- (24) <https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/your-views-how-can-we-clean-our-air>
- (25) <http://www.londonsdc.org/>
- (26) <https://data.london.gov.uk/blog/london-leads-on-initiative-generate-e500m-smart-city-investment-funds-from-e25m-eu-seed-funds/>
- (27) <https://urbanage.lsecities.net/essays/london-s-tech-city>
- (28) <https://www.campus.co/london/en/about#campus-cafe>
- (29) <http://www.tech.london/>
- (30) <https://www.ons.gov.uk/peoplepopulationandcommunity/householdcharacteristics/homeinternetandsocialmediausage/bulletins/internetaccesshouseholdsandindividuals/2016>



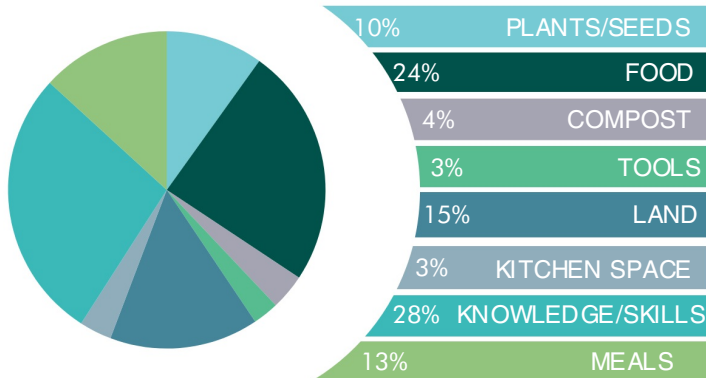
# MELBOURNE



Melbourne is ranked 3rd in the SHARECITY100 Database of global ICT-mediated food sharing, with 144 initiatives currently active in the city.



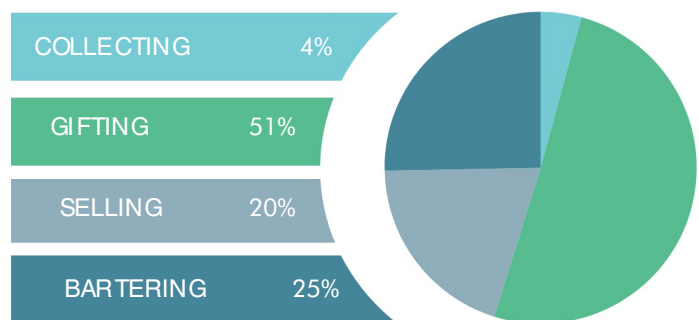
## WHAT IS SHARED



Melbourne has the most food sharing activities of the seven Australian and New Zealand cities listed in the SHARECITY 100 Database. 81% share multiple things. Knowledge and skills are the most highly shared with the second most shared item bring fruits and vegetables. Land also makes up a significant proportion of what is shared in Melbourne.

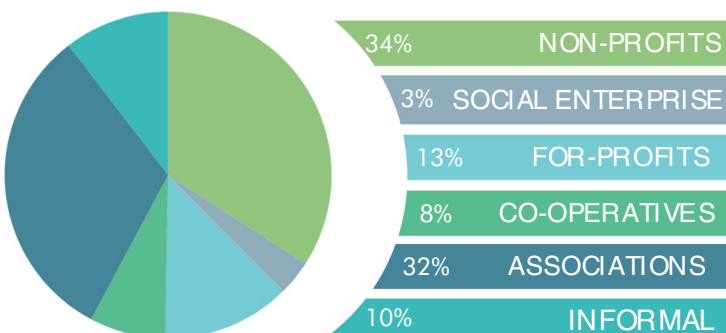
## HOW IT IS SHARED

Gifting is the most common form of exchange across food sharing initiatives in Melbourne, accounting for over half of all exchanges of stuff, spaces and skills. Bartering makes up a quarter of exchanges, followed closely by selling. Collecting is relatively infrequent. Overall 17% of initiatives share via multiple forms of exchange.



## SHARING ORGANISATION

Non profits (including charities) are the dominant model of food sharing initiative in Melbourne, followed by associations (including clubs and networks). Social enterprise and co-operative models are the least used organisational structures by initiatives who gift food and food related stuff, spaces and skills. 19% use more than one organisational structure.







---

## GEOGRAPHY & POLITICS

---



Melbourne is the capital city of the state of Victoria. It is located on Australia's southeastern coast. It is a vibrant city known for its art and culture and fluctuating climate. Australia has three government levels: federal, state and municipal. Melbourne comprises of thirty-one Local Government Areas which are each governed by a local council elected by their residents. Melbourne's landmass is 9,985 square kilometres with a population density of 4,400,300 per square kilometre (1). Greater Melbourne is the fastest growing city in Australia with a population of more than 4 million people that is expected to grow to between 7 and 8 million people by 2050 (2). In 2015, 28.2% of Australia's population of 6.7 million people were born overseas (3). Residents in Melbourne have a median age of 35.2 and a median income of \$48,053 per year (4).

Australia's population has a high level of cultural and linguistic diversity shaped by its diverse Indigenous population, British colonial past and extensive immigration. In 2011, approximately 2% of Australians were from Indigenous backgrounds, 43% had a parent born overseas, and 30% of the population were born in another country. In addition to English, more than 200 languages are spoken in Australia (5).

---

## ECONOMY & SOCIETY

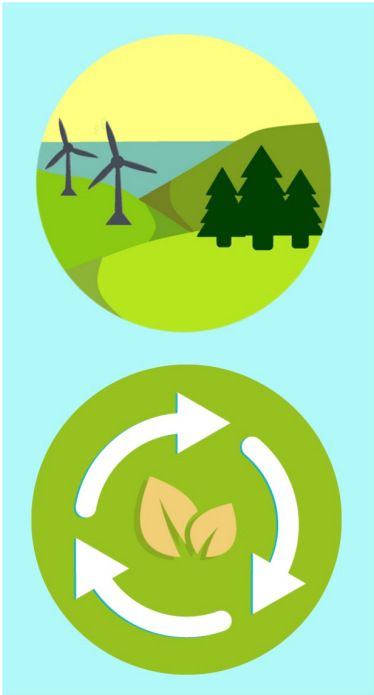
---

Considered a global city, Melbourne is the second largest city in Australia, accounting for 22% of Australia's GDP. Six of the top ten and twenty-nine of the top one hundred Australian companies' headquarters based in Melbourne (6). In 2016, Melbourne was announced the world's most liveable city for the sixth year in a row due to its stability, healthcare, culture and environment, education and infrastructure (7). Melbourne is a signatory to Agenda 21 and the United Nation Global Compact Cities Program.

Melbourne is facing challenges due to its changing economy, increasing demands on housing and infrastructure with a growing and ageing population, and changing climate (8). Australia has an unemployment rate of 5.7% (9) and 13.3% of Australians live below the poverty line (10). Housing affordability is becoming an increasing concern with housing costs rising to record levels (11).



# FOOD, ENVIRONMENT & SUSTAINABILITY



Supermarkets in Australia are some of the most monopolised in the world with duopoly Coles and Woolworths owning more than 80% of the national market. These corporations dominate territories of production, distribution and retail, “coming to determine what is produced, where, to what standards and price, and the outlets from which food is to be sold” (12). In addition to meeting supermarket demands, Australian farmers are struggling due to extreme weather patterns, loss of agricultural land and biodiversity, fossil fuel dependency, urbanisation and development, and the prioritisation of an export commodity-driven market (13). As Melbourne’s population grows, it is estimated that at least 60% more food will need to be grown to meet consumption demands (14).

Food-related health issues in Australia include high levels of obesity, food deserts, and hunger. More than 644,000 people seek food relief each month in the state of Victoria, yet more than 43,000 people are unable to be assisted (15). Furthermore, it is estimated that 50% of food is wasted along the food chain (16).

Melbourne is a signatory on the Milan Urban Food Policy Pact. The city has a long history of alternative food activities such as community gardens, food cooperatives, farmer’s markets, and food waste initiatives including foodbanks and food rescue (17). This sustainable food movement has gathered momentum in the last ten years and is developing new approaches to promote food systems change, such as food hubs, online web platforms, and disruption of regulatory boundaries to expand into new forms of food sharing. Community-driven and council-supported projects are often found in the inner and northern Melbourne suburbs of Darebin, Yarra, and the City of Melbourne.

## TECHNOLOGY

In Australia, 90% of adults actively use the internet, with 81% of households in Melbourne having home internet access, and nearly three quarters of Australians using mobile phones to access the internet. This percentage drops in regional Victoria where home internet averages 72%, falling to 60% in the Mallee Region. Disabled Victorians (16%) and the elderly (17%) are less likely to use the internet, with 38 per cent of people aged over 65 reported using the internet. 70% of Victorians use the internet to access social media, where 98% use Facebook and 15% use Twitter (18) (19) (20).



CITATION: Please cite as: Davies et al (2017) Melbourne SHARECITY Profile, Trinity College Dublin, Ireland

ACKNOWLEDGEMENT: SHARECITY is funded by the European Research Council (ERC) under the European Union’s Horizon 2020 Research and Innovation programme (Grant Agreement No. 646883).

## REFERENCES:

---

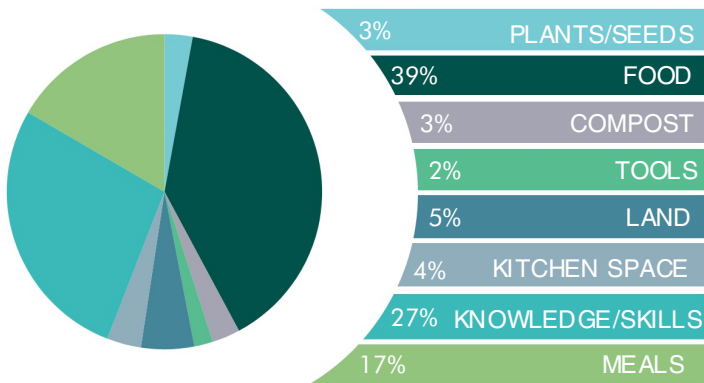
- (1) <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3218.02011?OpenDocument>
- (2) Krockenberger 2015
- (3) <http://www.abs.gov.au/ausstats/abs@.nsf/mf/3412.0/>
- (4) <http://stat.abs.gov.au/itt/r.jsp?databyregion>
- (5) <http://www.racismnoway.com.au/about-racism/population/>
- (6) IBISWorld Top 2000 Companies Sept 2015
- (7) Economist Global Liveability Survey 2016, [http://www.eiu.com/public/topical\\_report.aspx?campaignid=Liveability2016](http://www.eiu.com/public/topical_report.aspx?campaignid=Liveability2016)
- (8) Victoria State Government (2015) Plan Melbourne Refresh Discussion Paper, Melbourne: Victoria State Government. October.
- (9) <http://www.abs.gov.au/ausstats/abs@.nsf/mf/6202.0>
- (10) <http://www.acoss.org.au/poverty/>
- (11) VCOSS, <http://vcoss.org.au/state-budget-submission-2015-16-tackle-the-housing-crisis/>
- (12) Burch, Dixon & Lawrence (2013) Introduction to the symposium on the changing role of supermarkets in global supply food chains: From seedling to supermarket: Agrifood supply chains in Transition, Agriculture and Human Values, 30(2): 215-224, pp.216.
- (13) Burch, Dixon & Lawrence (2013) Introduction to the symposium on the changing role of supermarkets in global supply food chains: From seedling to supermarket: Agrifood supply chains in Transition, Agriculture and Human Values, 30(2): 215-224.
- (14) Carey, R., Larsen, K., Sheridan, J. and Candy, S. (2016) Melbourne's food future: Planning a resilient city foodbowl. Victorian Eco-Innovation Lab, The University of Melbourne.
- (15) Foodbank Hunger Report 2016.
- (16) Mason, L., Boyle, T., Fyfe, J., Smith, T., Cordell, D. (2011). National Food Waste Data Assessment: Final Report. Prepared for the Department of Sustainability, Environment, Water, Population and Communities, by the Institute for Sustainable Futures, University of Technology, Sydney: Sydney.
- (17) Edwards, F. (2011) Small, Slow and Shared: Emerging Social Innovations in Urban Australian Foodscapes, Australian Humanities Review, November. <http://www.australianhumanitiesreview.org/archive/Issue-November-2011/edwards.html>
- (18) DIR Part B Digital Readiness of Victorian Citizens
- (19) ABS 2009
- (20) Australia's digital economy update. Australian Government.



# NEW YORK



New York is ranked 2nd in the SHARECITY100 Database of global ICT-mediated food sharing, with 185 initiatives currently active in the city.

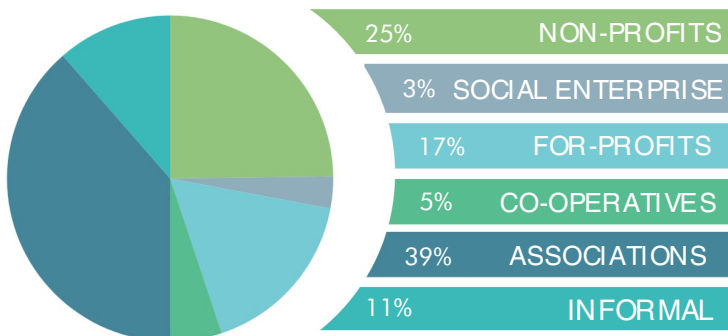
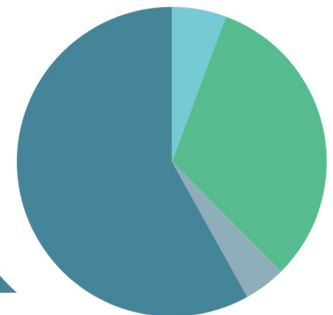
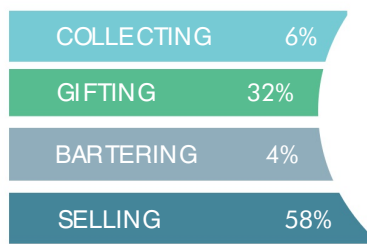


## WHAT IS SHARED

40% of New York food sharing initiatives share multiple things. Food (including fruits, vegetables, meat, fish and food products not combined or prepared into a meal), are most frequently shared, making up 39% of all sharing activities, followed by knowledge and skills, and meals. Tools, compost, plants, and seeds are shared least by food sharing initiatives in New York City.

## HOW IT IS SHARED

Selling is the most common form of exchange by food sharing initiatives in New York, followed by gifting. Collecting and bartering occur relatively infrequently. 22% of initiatives share via multiple forms of exchange, the most common combination being gifting and selling.



## SHARING ORGANISATION

Associations (including clubs and networks) are the most frequent organisational structure employed by food sharing initiatives in New York, followed by non-profits and charities. Social enterprises and co-operatives are relatively rare. 23% of Berlin initiatives employ more than one organisational structure within their operations.



---

## GEOGRAPHY & POLITICS

---



The City of New York is the most populous city in the United States and centre of the New York metropolitan area. It is composed of five boroughs and counties: Brooklyn (Kings County), Queens (Queens County), Manhattan (New York County), The Bronx (Bronx County), and Staten Island (Richmond County). The city is located at the southern coastal tip of New York State, where the Hudson River meets the Atlantic Ocean, and has a land mass of 783.83 square km, a population of 8.5 million, a density of 10,831 people per square km, and 836.86 km of coastline (1).

New York is a metropolitan municipality that is governed by a Mayor and City Council. The city government is responsible for public education, correctional institutions, public safety, recreational facilities, sanitation, water supply, and welfare services. For more than a decade the city has been a laboratory for a suite of progressive food policy and public health reforms pioneered by the Mayor's office of Food Policy.

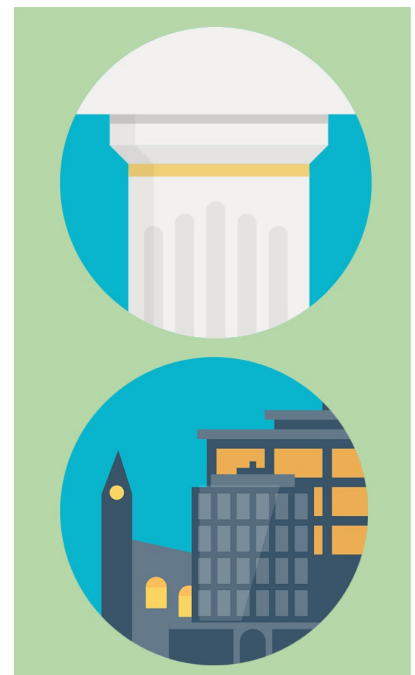
---

## ECONOMY & SOCIETY

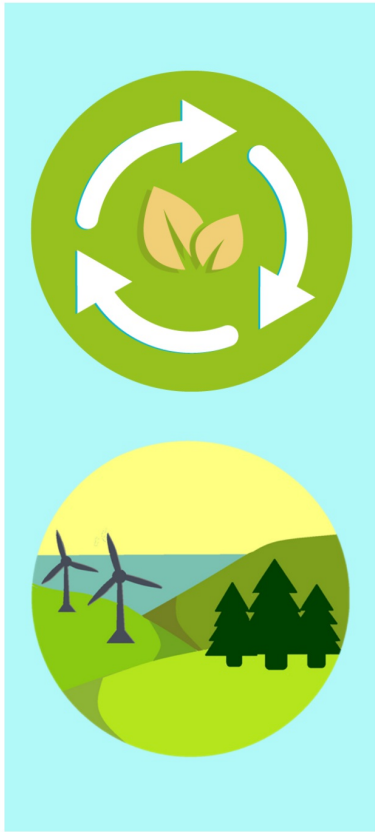
---

New York is an international hub for banking and finance, services, tourism, retailing, world trade, real estate, media, art, theatre, fashion, advertising, medical research, non-profits, and technology. It ranks 2nd in the 2016 Global City Index which assesses the current performance of 125 cities across a number of key performance indicators (2). It has some of the highest real estate values in the USA and high rates of Foreign Direct Investment (3). In October 2016, the City's seasonally adjusted unemployment rate was 5.9% (4). The birthplace of Occupy Wall Street, New York City is also home to labour unions and numerous networks and alliances for solidarity economy, cooperative economics, immigrant workers, and economic justice. The City and State governments have also taken steps to regulate the sharing economy (5).

New York is the most culturally and linguistically diverse city in America, with 37% of the population being born outside of the USA, and 48% speaking a language other than English at home. Around a third of the population identifies as White and non-Hispanic, 29% as Hispanic or Latino, 25% as Black or African American, and 13% as Asian (1). New York is also among the most unequal cities in America. Just over 20% of the population have incomes below the federal poverty line (1), and a similar level of residents receive SNAP benefits (food stamps) with more than three-quarters of students eligible for free or reduced cost school lunch (6). More than half of New Yorkers pay in excess of 30% of their incomes in rent, and just under a third of housing units are owner occupied. These inequalities have major public health consequences, with data indicating that 16% of New Yorkers and 23% of children are food insecure, while 23% of Adults are obese, with higher rates in the Bronx and Staten Island (7).



# FOOD, ENVIRONMENT & SUSTAINABILITY



New York City is a signatory on the Milan Urban Food Policy Pact, and it has become a national leader in food policies that target public health, sustainability, and waste. The City has created a multi-layered, data-driven set of policy interventions that reframe obesity and hunger as poverty issues, making sustainable and healthy eating collective and public concerns, rather than private and individual concerns (8). Several notable policies include: Executive Order No. 122 (2008) which created a Food Policy Coordinator position who is responsible for establishing NYC food standards for all food purchased, prepared, or served by city agencies and agency contractors (9); Local Law 48 (2011) which established a reporting requirement on the status of city owned property and will use data for a searchable database and map to encourage community food production on vacant land; Local Law 49 (2011) established new building codes for rooftop structures and greenhouses, thereby encouraging urban agriculture; and Local Law 52 (2011) which established a reporting requirement for a variety of city agencies and initiatives related to food and produced the Annual Food Metrics Report (10).

New Yorkers face geographically uneven risks related to flooding, air pollution, carcinogens, lead paint, hazardous waste (11), and food access (12). The city is home to three EPA Superfund sites (12), nearly 30,000 acres of parks and green spaces (13), more than 600 community gardens (14), and 225 community compost sites (15). New York is ranked 26th in the 2016 Arcadis Sustainable Cities Index and was selected as one of The Rockefeller Foundation's 100 Resilient Cities (16). It has committed to reducing its greenhouse gases by 80% by 2050 and becoming zero waste by 2030 (17), and is investing billions of dollars in coastal resiliency, green infrastructure, and flood mitigation projects. The City produces about 11 Metric tonnes of waste each day, of which roughly one quarter is food waste (18)(19), and it has passed several laws to promote residential, institutional, and commercial composting and divert organic waste from landfills (see Local Law 146). In 2013, the Mayor's Food Waste Challenge reduced waste by 2,268 metric tonnes in just six months (20)(21).

## TECHNOLOGY

New York City has high rates of internet connectivity, although not all areas have equal access to high speed broadband (22). Under the program Connect IBZ the NYCEDC will expand broadband access to underserved industrial business zones (23). In 2016, the city launched LinkNYC the first of its kind smart city infrastructure for public internet. More than 7,500 public pay phones are being replaced with LinkNYC kiosks that offer free high speed broadband WiFi, phone calls, USB charging for electronic devices, and tablets with access to countless online city resources and maps (24).



CITATION: Please cite as: Davies et al (2017) New York SHARECITY Profile, Trinity College Dublin, Ireland

ACKNOWLEDGEMENT: SHARECITY is funded by the European Research Council (ERC) under the European Union's Horizon 2020 Research and Innovation programme (Grant Agreement No. 646883).

## REFERENCES:

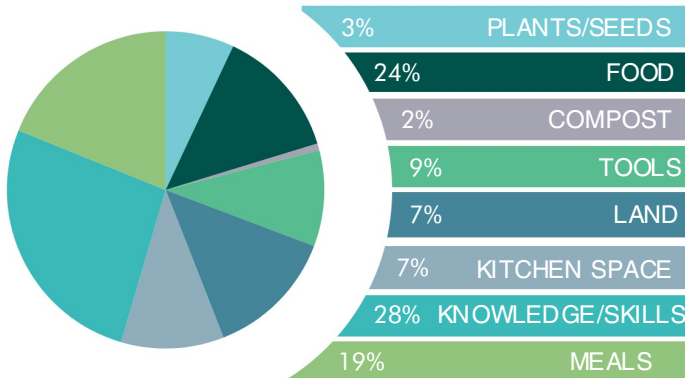
---

- (1) <https://www.census.gov/quickfacts/table/PST045216/3651000>
- (2) <https://www.atkearney.com/documents/10192/8178456/Global+Cities+2016.pdf/8139cd44-c760-4a93-ad7d-11c5d347451a>
- (3) <http://www.fdiintelligence.com/Locations/New-York-City-is-number-one-in-Americas-for-FDI-job-creation>
- (4) <https://www.labor.ny.gov/stats/nyc/>
- (5) [http://www.nytimes.com/2016/10/22/technology/new-york-passes-law-airbnb.html?\\_r=0](http://www.nytimes.com/2016/10/22/technology/new-york-passes-law-airbnb.html?_r=0)
- (6) <http://www.census.gov/programs-surveys/acs/>
- (7) <http://www.cdc.gov/nccdphp/dnpao/index.html>
- (8) <http://www.urban.org/research/publication/innovations-nyc-health-and-human-services-policy-food-policy>
- (9) <http://www1.nyc.gov/site/foodpolicy/index.page>
- (10) <http://www1.nyc.gov/assets/foodpolicy/downloads/pdf/2016-Food-Metrics-Report.pdf>
- (11) <https://ejscreen.epa.gov/mapper/>
- (12) <http://nag-brooklyn.org/toxicity-map/>
- (13) <https://www.epa.gov/superfund/search-superfund-sites-where-you-live>
- (14) <https://www.nycgovparks.org/about>
- (15) <http://www.greenthumbnyc.org/gardensearch.html>
- (16) [http://www1.nyc.gov/assets/sustainability/downloads/pdf/publications/New%20York%20City's%20Roadmap%20to%2080%20x%2050\\_20160926\\_FOR%20WEB.pdf](http://www1.nyc.gov/assets/sustainability/downloads/pdf/publications/New%20York%20City's%20Roadmap%20to%2080%20x%2050_20160926_FOR%20WEB.pdf)
- (17) <https://www.arcadis.com/media/076/6/%7B06687980-3179-47AD-89FD-F6AFA76EBB73%7DSustainable%20Cities%20Index%202016%20Global%20Web.pdf>
- (18) <http://www1.nyc.gov/assets/dsny/zerowaste/residents.shtml>
- (19) <https://www.grownyc.org/recycling/facts>
- (20) [http://www1.nyc.gov/assets/sustainability/downloads/pdf/publications/New%20York%20City's%20Roadmap%20to%2080%20x%2050\\_20160926\\_FOR%20WEB.pdf](http://www1.nyc.gov/assets/sustainability/downloads/pdf/publications/New%20York%20City's%20Roadmap%20to%2080%20x%2050_20160926_FOR%20WEB.pdf)
- (21) <http://www1.nyc.gov/assets/dsny/zerowaste/businesses/food-scraps-and-yard-waste.shtml>
- (22) [http://www.nyc.gov/html/planyc2030/downloads/pdf/140422\\_PlanYCP-Report\\_FINAL\\_Web.pdf](http://www.nyc.gov/html/planyc2030/downloads/pdf/140422_PlanYCP-Report_FINAL_Web.pdf)
- (23) <http://www.nycedc.com/program/connect-ibz>
- (24) <https://www.link.nyc/index.html>

# SAN FRANCISCO



San Francisco is ranked 18th in the SHARECITY100 Database of global food sharing, with 57 initiatives currently active in the city.

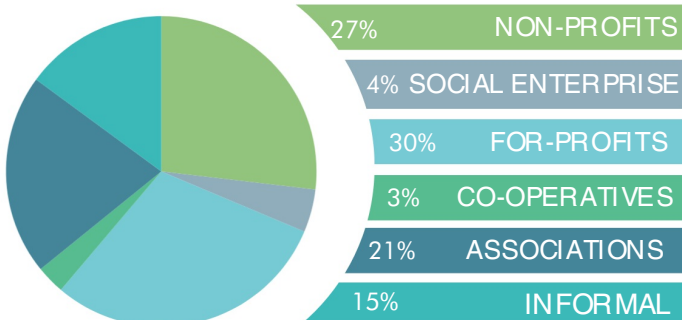
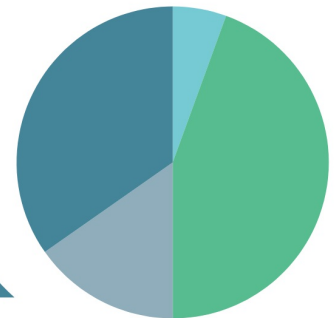
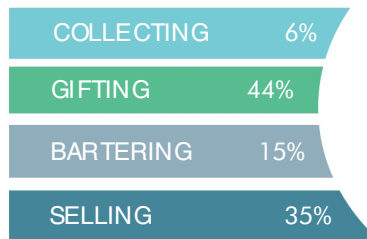


## WHAT IS SHARED

65% of food sharing initiatives in San Francisco share multiple things. Knowledge and skills are the most common thing shared followed by food (including fruit, vegetables, meat, fish, and food products not prepared into a meal) and meals. Compost, and plants and seeds are least shared in San Francisco.

## HOW IT IS SHARED

Gifting is the most common form of exchange used by food sharing initiatives, followed by selling and then bartering. Collecting was the least utilised mode of exchange. 19% of food sharing initiatives in San Francisco use more than one mode of exchange.



## SHARING ORGANISATION

For-profit food sharing enterprises are the most common type of initiative in San Francisco, followed by non-profits (including charities) and associations (including clubs and networks). Social enterprise and co-operative are the rarest organisational structures used by food sharing initiatives. 22% of initiatives employ more than one form within their operations.





## GEOGRAPHY & POLITICS



The city of San Francisco is located on the west coast of the United States on the north end of the San Francisco Peninsula. It is one of most populous urban areas on the west coast, with a city population of 810,000 and a metropolitan population of over 4 million (1). With a density of almost 7000 people km<sup>2</sup> it is the second most densely populated major city in the United States after Los Angeles, though only the 14th most populous overall (2). The city is laid out in a grid over some 40 hills, reaching heights of nearly 1,000 feet, surrounded on three sides by water.

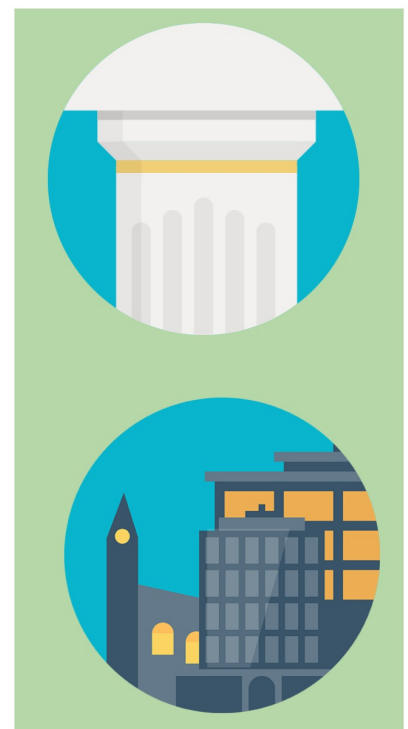
San Francisco is a consolidated city-county which has a mayor-council system of government defined by the Charter of the City and County of California. The mayor is elected to a four-year term as are the city council members, and acts as the chief executive who then appoints the city administrator and controller. The mayor has the responsibility to enforce all city laws including planning, waste management, and health and safety, administer and coordinate city departments and intergovernmental activities, set forth policies and agendas, and prepare and submit the city budget at the end of each fiscal year. The foremost source of state law is the Constitution of California, which in turn is subordinate to the Constitution of the United States.

## ECONOMY & SOCIETY

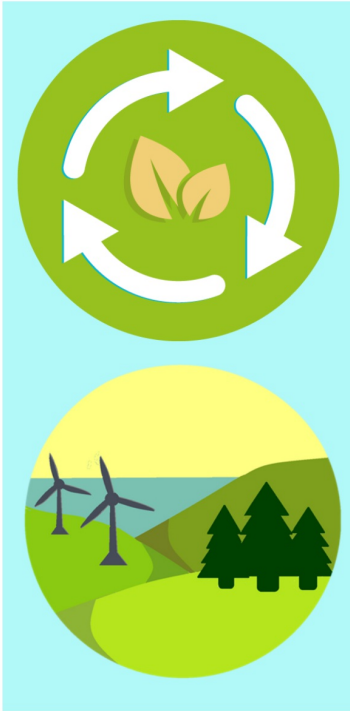
San Francisco has a diversified service economy, with professional services, science, and technology making up the largest employment sectors followed by leisure and hospitality (3). The city's natural resources and cultural attractions have made tourism one of the city's leading industries, and it has acted as the banking and financial centre for the west coast of the United States since the early 20th century. More recently it has become an international hub for technology and web-based services, particularly following the 'dot com' boom in the 1990s. Though the city is ranked only 23rd in the 2016 Global City Index it was ranked 1st for outlook, driven largely by its strength in innovation and private investment (4).

San Francisco has the highest quality of living in the United States (28th in the world) with high wages and salaries due to high levels of education and a concentration of jobs in well-paid areas (5). However the cost of living in San Francisco is 57.7% above the national average and deprived areas of the city are becoming increasingly gentrified (6). The city has the second highest rate of homelessness in the United States and according to the United States census 28% of San Francisco residents are at risk of being food insecure (7). In October 2014 the mayor announced an increase in minimum wage, making the city among the first jurisdictions in the USA to enact a minimum wage higher than Federal or State minimum wage (8).

San Francisco has a history of being a hotspot for alternative cultural movements and a centre for liberal activism. Known for its ethnic and cultural diversity, it has one of the country's highest concentrations of new immigrants and roughly half of the city's population have an ethnicity other than white (9).



# FOOD, ENVIRONMENT & SUSTAINABILITY



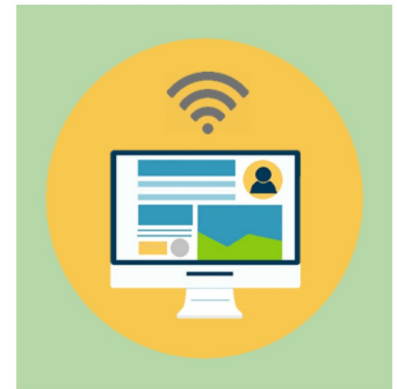
San Francisco has long had an active environmental community and in 2011 it was ranked the Greenest City in North America, scoring highly in categories such as air, energy, buildings, transport, waste and water (10). In 2009 it became the first local municipal ordinance in the U.S. to require recycling and composting for residents, commercial properties, food establishments and events, and was one of earliest cities in the United States to provide curb-side recycling program (11). As a result 77% of the city's waste is recycled. The city has pioneered a number of policies such as a ban on disposable plastic bags, and single-use plastic water bottles (12). Introduced in 2007 the Food Service Waste Reduction Ordinance requires food vendors and restaurants in San Francisco to use compostable or recyclable to-go containers (13), and 2017 will see all polystyrene food packaging prohibited (e.g. coffee cups, packing peanuts) (14).

In 2009 the mayor of San Francisco announced the first-ever comprehensive food policy for San Francisco to promote healthy and sustainable food. Taking a holistic approach it approaches the food system from production through distribution and consumption to recycling and is organised around themes of Nutrition, Urban Agriculture, Regional Food, Hunger and Food Security, Food Business and Fisheries.

The San Francisco Recreation & Parks Department maintains over 1000 community gardens or allotment plots (15). The city has a well-established system of public transport including light rail, subway, bus networks and an underwater connection to East bay, giving the city the fourth highest public transport use in the United States (16). The city was also an early adopter of car sharing and was ranked the second most walkable city in the US (17).

## TECHNOLOGY

San Francisco is a global leader and headquarters for technology and information companies. Technology jobs accounted for just 1 percent of San Francisco's economy in 1990, growing to 4 percent in 2010 and an estimated 8 percent by the end of 2013 (18). It holds a unique position as one of the epicentres for the emerging online sharing economy, being the birthplace of many of the large sharing economy players and peer-to-peer platforms such as Airbnb, Lyft, Uber, and TaskRabbit. Following years of fostering thousands of internet and tech start-ups it can be seen as a model city for sharing economic policy, innovation and creative grassroots sharing projects. In 2012 San Francisco's Mayor Ed Lee announced the formation of The Sharing Economy Working Group, and the city is also home to Shareable, a non-profit which advocates for the sharing economy as well as providing education around the need for new policies to support sharing, mutual aid, and co-production in cities.



CITATION: Please cite as: Davies et al (2017) San Francisco SHARECITY Profile, Trinity College Dublin, Ireland

ACKNOWLEDGEMENT: SHARECITY is funded by the European Research Council (ERC) under the European Union's Horizon 2020 Research and Innovation programme (Grant Agreement No. 646883).

## REFERENCES:

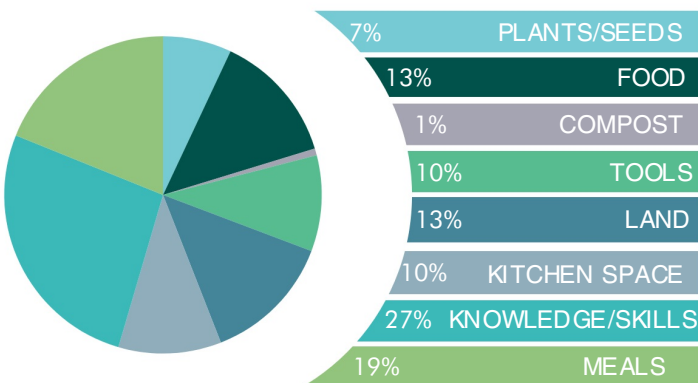
---

- (1) <http://www.demographia.com/db-uzajuris.pdf>
- (2) [http://www.citymayors.com/gratis/uscities\\_100.html](http://www.citymayors.com/gratis/uscities_100.html)
- (3) [http://www.bls.gov/regions/west/news-release/occupationalemploymentandwages\\_sanfrancisco.htm](http://www.bls.gov/regions/west/news-release/occupationalemploymentandwages_sanfrancisco.htm)
- (4) <https://www.atkearney.com/documents/10192/8178456/Global+Cities+2016.pdf/8139cd44-c760-4a93-ad7d-11c5d347451a>
- (5) <https://www.imercer.com/content/mobility/quality-of-living-city-rankings.html>
- (6) <http://www.forbes.com/places/ca/san-francisco/>
- (7) <https://www.sfdph.org/dph/files/mtgsGrps/FoodSecTaskFrc/docs/FSTF-AssessmentOfFoodSecurityInSF-2013.pdf>
- (8) <http://sfmayor.org/minimum-wage>
- (9) <http://www.census.gov/quickfacts/table/AGE115210/06075>
- (10) <http://www.siemens.com/press/pool/de/events/2011/corporate/2011-06-northamerican/northamerican-gci-report-e.pdf>
- (11) As above
- (12) <http://sfenvironment.org/cas/milestones>
- (13) <http://sfenvironment.org/article/food-service-waste-reduction-ordinance-2007-requirements-food-vendors-restaurants>
- (14) <http://sfenvironment.org/article/prevent-waste/polystyrene-foam-and-the-food-service-and-packaging-waste-reduction-ordinance>
- (15) <http://sfrecpark.org/wp-content/uploads/community-gardens-annual-report-2014-v-4.pdf>
- (16) [https://en.wikipedia.org/wiki/List\\_of\\_U.S.\\_cities\\_with\\_high\\_transit\\_ridership](https://en.wikipedia.org/wiki/List_of_U.S._cities_with_high_transit_ridership)
- (17) <https://www.walkscore.com/cities-and-neighborhoods/>
- (18) <http://www.spur.org/news/2014-02-27/forecasting-san-francisco-s-economic-fortunes>

# SINGAPORE



Singapore is ranked 27th in the SHARECITY100 Database of global ICT-mediated food sharing, with 50 initiatives currently active in the city.

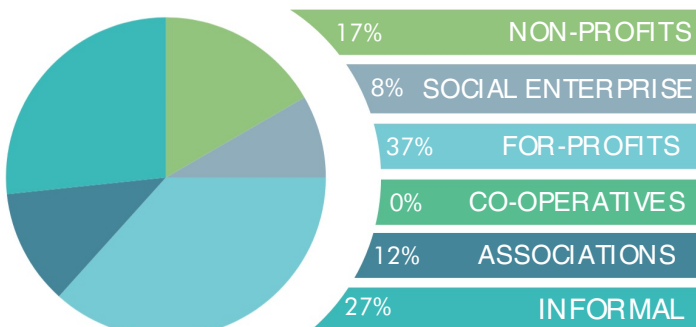
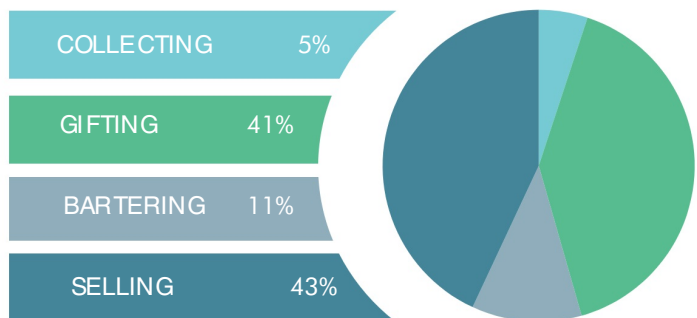


## WHAT IS SHARED

80% of food sharing initiatives in Singapore share multiple things. Knowledge and skills makes up the largest portion of stuff, spaces or skills shared, followed by meals, and food (including fruit, vegetables, meat, fish and food products not prepared into a meal). Compost, plants, and seeds are least shared in Singapore.

## HOW IT IS SHARED

Selling makes up the largest portion of food sharing activities in Singapore, followed very closely by gifting. Collecting and bartering are relatively infrequent. 44% of initiatives use multiple modes of exchange to share food, the most common combination being gifting along with selling.



## SHARING ORGANISATION

For profit enterprises are the most common form of food sharing initiative in Singapore, followed by informal initiatives, and non-profits (including charities). No initiatives in Singapore were established as co-operatives. Of the initiatives identified only 20% use multiple organisational structures



## GEOGRAPHY & POLITICS



Singapore is a sovereign city-state in Southeast Asia made up of the island of Singapore and about 62 smaller islands, with total landmass of 710.2 sq. km (1). The main island has a population of 5.75 million, and it is the second densest sovereign state in the world. Singapore is a Republic with a parliamentary system of government, which has been dominated by the People's Action Party (PAP) since gaining independence from Malaysia in 1965, though the formal Head of State of the Republic of Singapore is the President. The power structure is highly centralized and characterized by a top-down governance style, and its politics are rooted in the Confucian ethics, with a focus on family values and loyalty to the society (2).

Singapore is ranked 8th in the 2016 Global City Index which assesses 125 cities across five dimensions, including business activity, human capital, information exchange, cultural experience, and political engagement (3). However, despite Singapore's accomplishments, the country receives a much lower ranking for freedom of speech and democracy, and in 2014 was ranked 153rd out of 180 nations on the Press Freedom Index published by Reporters Without Borders (4). Additionally, the 2015 Democracy Index identified Singapore as a "flawed democracy" and ranked it 74th out of 167 countries (5).

## ECONOMY & SOCIETY

Singapore is one of the Asian Tigers, known for its neoliberal free trade export policies. The GDP in Singapore was 292.74 billion US dollars in 2015 and it represents 0.47 per cent of the world economy (6). The World Economic Forum ranked Singapore 2nd in its Global Competitiveness Report 2011-2012 (7) and the 2016 Index of Economic Freedom ranks Singapore as the second most liberalised economy in the world (8). Since Singapore's independence, the Economic Development Board implemented national economic strategies to promote the country's manufacturing sector and export-oriented industrialization. Currently, focused measures are in place to develop Singapore as a world-class financial centre and continue investing in new growth sectors such as clean technology and biotechnology.

Singapore is a multi-racial and multi-ethnic society, with a mix of Asian and European cultures. All citizens are assured access to education, and primary education is compulsory. Unemployment is very low, with rate of 1.9 % recorded in 2015, and there is currently no minimum wage policy and no retirement protection for the elderly population (9). Singapore ranks 11th in the Human Development Index, though the city faces an aging population and a need for greater investment in social infrastructure including regulation of working hours, income inequality and affordability (10) (11). Homelessness is also an issue in Singapore; the majority of homeless individuals are men in their 50s and the affected families are predominantly low income households (with monthly income of \$1, 500 or less), with 4 or more members who have weak social support (12).



# FOOD, ENVIRONMENT & SUSTAINABILITY



Only 1 % of land in Singapore is used for farming and the island imports over 90% of its food (13). However, in spite of its dependence on food imports, Singapore was ranked the second most food secure nation in the world in 2015 (14). A food crisis in 2008 sparked a new interest in urban farming, and the trend of growing of food on rooftops, footpaths and vacant lots is slowly taking root.

Singapore's environmental policies have been a cornerstone of public policy. The city is also well known for its greening policies and the vision of "City in a Garden". In the 2011 Asian Green City Index, Singapore was ranked Asia's greenest metropolis, with the best environmental performance in energy and carbon dioxide emissions, land use and buildings, transport, waste, water, sanitation, air quality and environmental governance (15). In 2015 the Ministry of the Environment and Water Resources (MEWR) released the Sustainable Singapore Blueprint (SSB), which outlined national vision and plans for sustainable Singapore. These include smart technology and eco-friendly features; cycling and walking trails; electric car sharing and driverless car trials; green economy industry and active community stewardship (16). Singapore has also set an ambitious goal to make at least 80% of all buildings 'green' by 2030 as part of a broader climate change agenda, and to become a Zero Waste Nation by reaching overall recycling rate of 70% (17)(18). A 2016 ranking of global sustainable cities ranked Singapore 2nd overall, with the city coming in 1st in profit, 12th in planet and 48th for people (19).

## TECHNOLOGY

The World Economic Forum's 2015 Global Technology Report described Singapore as the most "Tech-Ready Nation" in the world (20). It has the world's highest smartphone penetration rates at almost 90% of the population, and in 2016 it found that almost 82.5% of the population are internet users (21). A government programme was established to bridge digital divide and increase IT awareness and literacy among the elderly and attracted over 3,000 senior participants (22). The Smart Nation program, with a goal to create a hyper-connected nation, was launched in 2014 in order to deploy number of sensors and cameras across Singapore that will allow extensive governmental monitoring of the city. According to the Singaporean government, the Smart Nation is shaping the image of the city as a participatory online platform where citizens can interact, share and observe real time data and become active as citizens of a future regulatory body (23).



CITATION: Please cite as: Davies et al (2017) Singapore SHARECITY Profile, Trinity College Dublin, Ireland

ACKNOWLEDGEMENT: SHARECITY is funded by the European Research Council (ERC) under the European Union's Horizon 2020 Research and Innovation programme (Grant Agreement No. 646883).

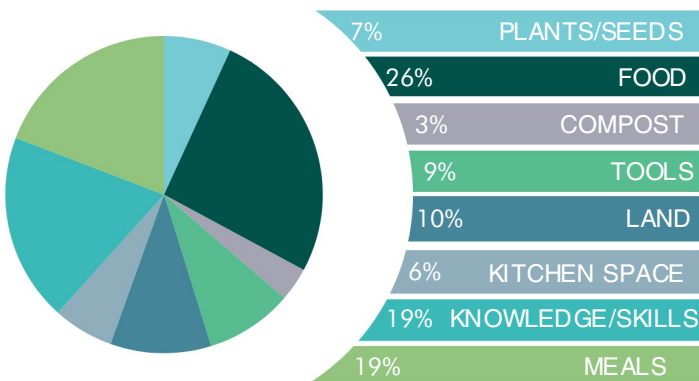
## REFERENCES:

---

- (1) <https://en.wikipedia.org/wiki/Singapore>
- (2) <https://www.guidemesingapore.com/relocation/introduction/singapores-political-system>
- (3) <https://www.atkearney.com/documents/10192/8178456/Global+Cities+2016.pdf/8139cd44-c760-4a93-ad7d-11c5d347451a>
- (4) <https://en.wikipedia.org/wiki/Singapore>
- (5) [https://en.wikipedia.org/wiki/Democracy\\_Index#Democracy\\_index\\_by\\_country\\_.282015.29](https://en.wikipedia.org/wiki/Democracy_Index#Democracy_index_by_country_.282015.29)
- (6) [https://en.wikipedia.org/wiki/Economy\\_of\\_Singapore](https://en.wikipedia.org/wiki/Economy_of_Singapore)
- (7) [http://www3.weforum.org/docs/WEF\\_GCR\\_CountryProfilHighlights\\_2011-12.pdf](http://www3.weforum.org/docs/WEF_GCR_CountryProfilHighlights_2011-12.pdf)
- (8) <http://www.heritage.org/index/country/singapore>
- (9) <http://www.heritage.org/index/country/singapore>
- (10) <http://hdr.undp.org/en/data>
- (11) <https://www.arcadis.com/media/0/6/6/%7B06687980-3179-47AD-89FD-F6AFA76EBB73%7DSustainable%20Cities%20Index%202016%20Global%20Web.pdf>
- (12) <https://app.msf.gov.sg/Press-Room/Numbers-and-profile-of-homeless-persons>
- (13) [http://www.clc.gov.sg/documents/books/Smart\\_food\\_governance\\_paper-SG\\_case\\_study\\_FINAL\\_Sept%2028\\_3.pdf](http://www.clc.gov.sg/documents/books/Smart_food_governance_paper-SG_case_study_FINAL_Sept%2028_3.pdf)
- (14) <http://foodsecurityindex.eiu.com/>
- (15) [http://sg.siemens.com/city\\_of\\_the\\_future/\\_docs/Asian-Green-City-Index.pdf](http://sg.siemens.com/city_of_the_future/_docs/Asian-Green-City-Index.pdf)
- (16) <http://www.mewr.gov.sg/ssb/>
- (17) [https://www.arcadis.com/media/5/0/4/%7B50426B80-6A0D-4961-8CE8-D2149B8652BD%7D16-697%20070916%20AG1022\\_Sustainable%20Cities%20Index\\_2016\\_EUROPE%20version%20web%20def4.p](https://www.arcadis.com/media/5/0/4/%7B50426B80-6A0D-4961-8CE8-D2149B8652BD%7D16-697%20070916%20AG1022_Sustainable%20Cities%20Index_2016_EUROPE%20version%20web%20def4.p)
- (18) df
- (19) [https://en.wikipedia.org/wiki/Environmental\\_Performance\\_Index](https://en.wikipedia.org/wiki/Environmental_Performance_Index)  
[https://www.arcadis.com/media/5/0/4/%7B50426B80-6A0D-4961-8CE8-D2149B8652BD%7D16-697%20070916%20AG1022\\_Sustainable%20Cities%20Index\\_2016\\_EUROPE%20version%20web%20def4.p](https://www.arcadis.com/media/5/0/4/%7B50426B80-6A0D-4961-8CE8-D2149B8652BD%7D16-697%20070916%20AG1022_Sustainable%20Cities%20Index_2016_EUROPE%20version%20web%20def4.p)
- (20) df
- (21) df
- (22) [http://www3.weforum.org/docs/WEF\\_Global\\_IT\\_Report\\_2015.pdf](http://www3.weforum.org/docs/WEF_Global_IT_Report_2015.pdf)  
<http://www.internetlivestats.com/internet-users/singapore/>
- (23) <http://www.cnbc.com/2016/04/05/singapore-bridges-digital-divide-with-intergenerational-it-bootcamps.html>  
<http://www.smartnation.sg/>

# Zurich

Zurich is ranked 37th in the SHARECITY100 Database of global ICT-mediated food sharing, with 42 initiatives currently active in the city.

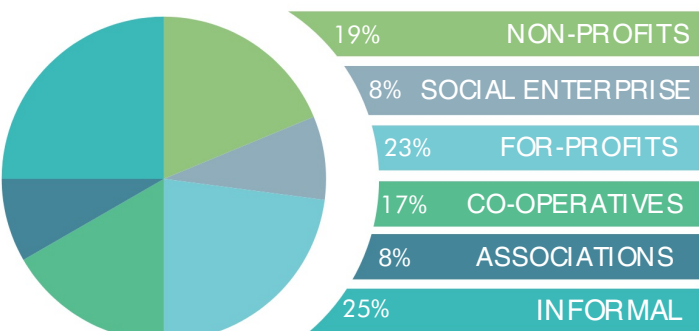
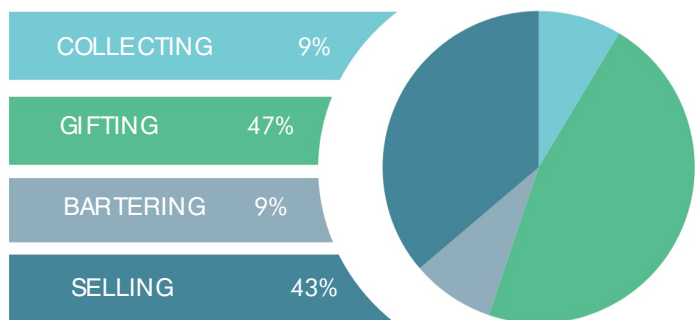


## WHAT IS SHARED

81% of food sharing initiatives in Zurich share multiple things. Food (including fruit, vegetables, meat, fish and food products not prepared into a meal) is the most commonly shared good, followed by knowledge and skills, and meals. Compost, and kitchen space (including kitchen devices) are least shared in Zurich.

## HOW IT IS SHARED

Gifting makes up the largest portion of food sharing activities in Singapore, followed closely by selling. Collecting and bartering are relatively infrequent. 55% of initiatives use multiple modes of exchange to share food, the most common combination being gifting along with selling.



## SHARING ORGANISATION

Informal enterprises are the most common form of food sharing initiative in Singapore, followed by for-profit enterprises, and then non-profits (including charities). Social enterprises and associations (including clubs and networks) are the least frequent structures. Of the initiatives identified only 20% use more than one organisational structure in their operations.





## GEOGRAPHY & POLITICS



Zurich, the largest city in Switzerland, is located in north-central Switzerland at the Northwestern tip of Lake Zurich. The municipality has approximately 400,028 inhabitants while the wider metropolitan is home to 1.83 million people (1). As a commune (Gemeinde), which is the smallest unit of political organization in Switzerland, Zurich has considerable freedom of choice and autonomy. The City Council (Stadtrat) constitutes the executive government and operates as a collegiate authority; the City Parliament (Gemeinderat) holds the legislative power. Citizens can vote on legislative proposals and laws and elect the members of the municipal council and the City Council.

In the 2016 Global City Index, Zurich was ranked 31th with its highest score in governance leadership (2). The City of Zurich has defined 25 strategic development goals with an emphasis on becoming an attractive economic location, building stable public finances, sustainable growth, creating a unified society, sustainable energy and environmental protection, developing as a digital city, and a common representation of interests and internal organisations (3).

## ECONOMY & SOCIETY

Zurich is one of the world's leading financial centres. It was ranked fifth overall in the 2015 Global Financial Centres Index, coming second in Europe (4). The city is home to a vast number of international banking companies, top ranking universities and a number of research and development centres. Low business tax rates make the city attractive to overseas companies, and a number of large, global corporations such as Google, Microsoft, ABB, General Motors Europe and IBM have established key offices in Zurich.

The most important sector in the economy is the service industry, which employs nearly four-fifths of the city's workers (5). Other important industries include machine and textile manufacturing and tourism. Zurich is the driving force behind Switzerland's wealth, producing a quarter of the country's GDP (6).

32% of the city's population are foreign-born, having come to Zurich from over 170 countries. The current unemployment rate is about 2.2% (7) and the number of people living on social welfare is approximately 5% (8). In a 2016 survey which assessed the quality of living in cities, Zurich was ranked 2nd, scoring particularly highly in personal safety based upon rates of internal stability, crime, effectiveness of law enforcement and relationships with other countries (9).



# FOOD, ENVIRONMENT & SUSTAINABILITY

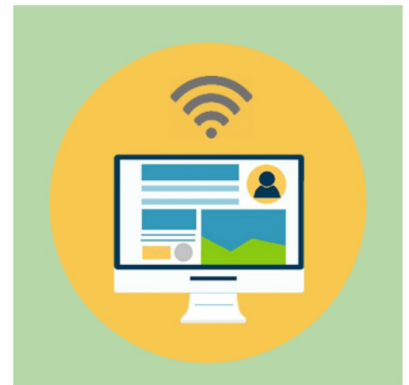


Currently 10% of the city area is classified as agricultural land, including 25 farms, 5,500 allotment gardens, 20 community gardens, as well as a number of migrant gardens and hobby animal holdings (10). Some are commercial urban farming initiatives while others are focused on education and environmental awareness. The Green City Zurich administration is in charge of agriculture policies and the management of public green spaces, which constitute 37% of the city's land (11). City initiatives in terms of food have so far focused on food safety and land policies, such as organic cultivation or support of biodiversity.

The Siemens European Green City Index ranked Zurich in 6th place and it was found to have a recycling rate of 34%, almost double the average rate of 18% amongst other cities (12). Zurich was also found to have the lowest carbon dioxide emissions across European cities (13). In the 2016 Arcadis Sustainable Cities Index, Zurich was the leading city overall as well as in the planet sub-index. The ambitious city plan to become first "2000-Watt-Society" by 2050, by reducing energy consumption by 2000 watt per person, was approved by Zurich citizens in 2008 and further integrated in the political and environmental city agendas (14).

## TECHNOLOGY

As one of the city's goals is to become Europe's technology hub and a 'digital city', Zurich plans to invest in digital infrastructure in order to foster an environment for digital innovation growth. Internet penetration rate in Zurich is at 93%, allowing the knowledge industry to play a role as a key driver of innovation and future growth (15). One key initiative includes DigitalZurich2025, a cross-industry initiative set up in 2015 aimed at making Zurich attractive to digital start-ups, companies and entrepreneurs, as well as playing a supportive role for established Swiss companies in overcoming today's digital challenges (16). Another initiative includes the Switzerland Innovation Park which launched this year as an innovative hub for research and development, connecting science institutions and businesses with a focus on digital technologies and communication among others (17). A number of hackathon events also take place in Zurich every year including HackZurich, the biggest such European festival (18).



CITATION: Please cite as: Davies et al (2017) Zurich SHARECITY Profile, Trinity College Dublin, Ireland

ACKNOWLEDGEMENT: SHARECITY is funded by the European Research Council (ERC) under the European Union's Horizon 2020 Research and Innovation programme (Grant Agreement No. 646883).

## REFERENCES:

---

- (1) <http://www.coe.int/en/web/interculturalcities/zurich>
- (2) <https://www.atkearney.com/documents/10192/8178456/Global+Cities+2016.pdf/8139cd44-c760-4a93-ad7d-11c5d347451a>
- (3) [https://www.stadt-zuerich.ch/portal/de/index/politik\\_u\\_recht/stadtrat/strategien2035/broschuere.html](https://www.stadt-zuerich.ch/portal/de/index/politik_u_recht/stadtrat/strategien2035/broschuere.html)
- (4) [http://www.awa.zh.ch/internet/volkswirtschaftsdirektion/awa/en/standortfoerderung/cluster/finanzdienstleistungen/jcr\\_content/contentPar/downloadlist/downloaditems/the\\_zurich\\_banking\\_c.spooler.download.1422016794873.pdf/leporello\\_zurichbanking\\_centre\\_2015\\_2016\\_e.pdf](http://www.awa.zh.ch/internet/volkswirtschaftsdirektion/awa/en/standortfoerderung/cluster/finanzdienstleistungen/jcr_content/contentPar/downloadlist/downloaditems/the_zurich_banking_c.spooler.download.1422016794873.pdf/leporello_zurichbanking_centre_2015_2016_e.pdf)
- (5) <https://de.wikipedia.org/wiki/Z%C3%BCrich>
- (6) <https://www.oecd.org/gov/regional-policy/Country-statistics-profile-Switzerland.pdf>
- (7) <http://www.nyc.gov/html/ia/gprb/html/global/global.shtml>
- (8) <https://de.wikipedia.org/wiki/Z%C3%BCrich>
- (9) <https://www.imercer.com/content/mobility/quality-of-living-city-rankings.html>
- (10) [http://orgprints.org/28887/1/RUAF%20UA%20Artikel%20I\\_OS%20Mai%202015.pdf](http://orgprints.org/28887/1/RUAF%20UA%20Artikel%20I_OS%20Mai%202015.pdf)
- (11) [https://www.stadt-zuerich.ch/portal/en/index/portraet\\_der\\_stadt\\_zuerich/zahlen\\_u\\_fakten.html](https://www.stadt-zuerich.ch/portal/en/index/portraet_der_stadt_zuerich/zahlen_u_fakten.html)
- (12) [http://www.siemens.com/entry/cc/features/greencityindex\\_international/all/en/pdf/zurich.pdf](http://www.siemens.com/entry/cc/features/greencityindex_international/all/en/pdf/zurich.pdf)
- (13) [http://www.siemens.com/entry/cc/features/greencityindex\\_international/all/en/pdf/zurich.pdf](http://www.siemens.com/entry/cc/features/greencityindex_international/all/en/pdf/zurich.pdf)
- (14) [https://en.wikipedia.org/wiki/2000-watt\\_society](https://en.wikipedia.org/wiki/2000-watt_society)
- (15) [https://knoema.com/isoc\\_r\\_iacc\\_h/households-with-access-to-the-internet-at-home?geo=1028800-z%C3%BCrich](https://knoema.com/isoc_r_iacc_h/households-with-access-to-the-internet-at-home?geo=1028800-z%C3%BCrich)
- (16) [z%C3%BCrich](https://knoema.com/isoc_r_iacc_h/households-with-access-to-the-internet-at-home?geo=1028800-z%C3%BCrich)
- (17) <http://digitalswitzerland.com/>
- (18) <https://www.switzerland-innovation.com/offer/zurich>  
<http://hackzurich.com/>

[www.sharecity.ie](http://www.sharecity.ie)



This publication was authored by the SHARECITY research team in 2016. All or part of this publication may be reproduced without further permission, provided the source is acknowledged.

**Please Cite as: Davies, A., and Weymes, M. (2017) SHARECITY Briefing Note 2: SHARECITY Profiles, Trinity College Dublin, Ireland.**

Prof. Anna R. Davies  
[daviesa@tcd.ie](mailto:daviesa@tcd.ie)

Marion Weymes  
[weymesma@tcd.ie](mailto:weymesma@tcd.ie)

Dr. Ferne Edwards  
[edwardsf@tcd.ie](mailto:edwardsf@tcd.ie)

Dr. Oona Morrow  
[morrowo@tcd.ie](mailto:morrowo@tcd.ie)

Dr. Brigida Marovelli  
[marovelb@tcd.ie](mailto:marovelb@tcd.ie)

Monika Rut  
[rutm@tcd.ie](mailto:rutm@tcd.ie)



**Trinity College Dublin**  
Coláiste na Tríonóide, Baile Átha Cliath  
The University of Dublin



Horizon 2020  
European Union funding  
for Research & Innovation



**European Research Council**  
Established by the European Commission