Federated States of Micronesia 2013/2014 HIES
ICT and transport

Executive summary

71%
of households have access to communication

US$965
average annual household spend on transport (11.8% of the total household cash expenditure)

15%
of the population aged 10 and above reported using the internet

5%
of households travel abroad by plane and **4%** within the country

Introduction

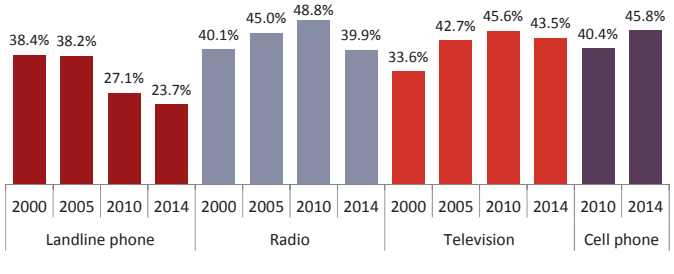
Information and communication technology (ICT) includes goods such as computers, tablets, telephones (land line and cell phones), radios, televisions, DVD players, stereo equipment, GPS devices and camera equipment; and ICT services such as audiovisual consumption (DVDs, CDs, cable TV) and telecommunication services (telephone and internet). Transport comprises purchase and maintenance of vehicles and boats, fuel, transport services provided by buses, taxis, planes and boats (including fares) and freight.

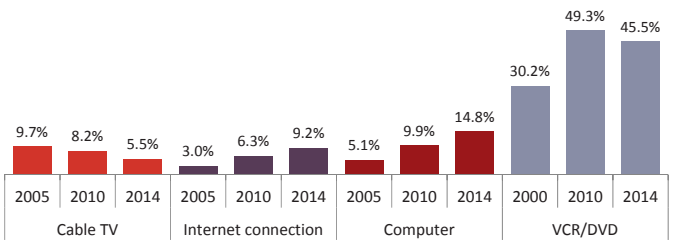
Low access to communication networks

In Federal States of Micronesia (FSM), 29% of households (HH) overall do not have a television, radio, or phone (landline and cell phone), nor do they access the internet, meaning that they are out of the communication network. This is the experience of almost 42% of HHs in Chuuk compared to 9% in Kosrae, 23% in Yap and 21% in Pohnpei.

Since 2000, the proportion of HHs with a landline telephone has dropped with significant uptake of the use of cell phones. The proportion of HHs that have TV has remained stable since 2005 (around 43%) but ownership of radios fell in 2013 (Chart 1). Access to cable TV and internet, and ownership of computers remain very low, covering less than 10% of HHs in FSM.

Chart 1: Proportion of HH who access communication devices and services at home, by year[1]





[1] *ICT and transport indicators are derived from the 2000 FSM census, 2005 household income and expenditure survey (HIES), 2010 census and 2014 HIES.*

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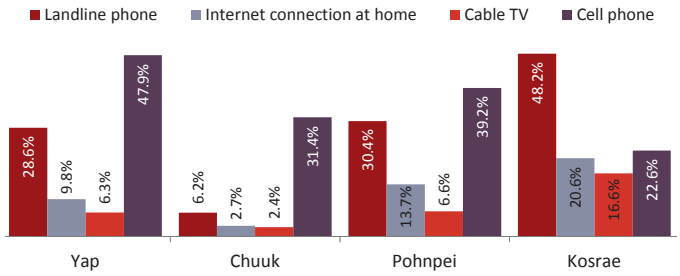
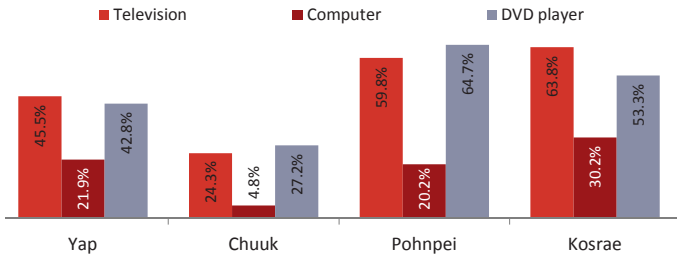
In terms of communication services, each state operates differently. In Yap and Pohnpei, cell phones are more commonly used, with 47.9% and 39.2% of HHs, respectively, owning at least one cell phone that is activated and able to receive a signal at the dwelling. Around 30% of HHs have an operational landline phone in both states (Chart 2). In Chuuk, only 6% of HHs own a landline phone and cell phones remain the main mode of communication; 31.4% of HHs in Chuuk can use cell phones from home, meaning that 66.3% cannot. In Kosrae, 48.2% of HHs are connected to landline phone networks. The percentage of HHs that own at least one activated cell phone and can receive a signal at home is the lowest for all states (22.6%).

In terms of cell phone coverage, in Chuuk and Kosrae, almost 20% of the HHs that own at least one activated cell phone cannot receive at signal at home. The same situation applies to only 7% of cell-phone owning HHs in Yap and to none in Pohnpei.

Chart 2: Proportion of HHs, by state, that:
(a) access communication service from home



(b) and own ICT devices



HH ownership of motorised transport

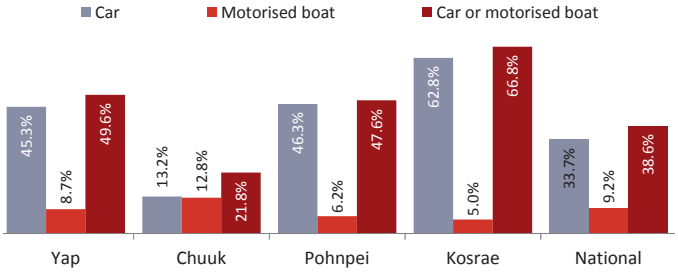
Since 2000, the proportion of HHs that own a car in FSM has remained stable (from 31% in 2000 to 34% in 2014). However, the proportion of HHs that own a boat dropped from 21% in 2005 to 15% in 2014.

61%

of HHs do not own any form of motorised transportation (car, motorbike or boat)

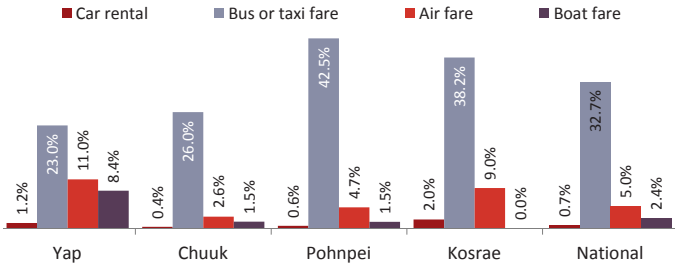
In FSM, 61% of HHs do not own any form of motorised transportation (car, motorbike or boat). In Kosrae, this proportion goes down to 33%, while it reaches 78% in Chuuk and 50% in Pohnpei and Yap. Cars are the main mode of transportation in Yap, Pohnpei and Kosrae (Chart 3) and motorbikes or scooters are uncommon (less than 1% of HHs own one). In Chuuk, cars are not common and boats are used more than in other states as a result, there are similar rates for ownership of cars and boats (around 13%).

Chart 3: Proportion of HHs that own at least one car, one motorised boat or one of both (2014)



One-third of HHs pay taxi or bus fares, especially in Pohnpei and Kosrae (42% and 38%). Car rental is not particularly common in any of the four states and payment for boat services only concerns 8% of HHs in Yap. In Yap and Kosrae, 11% and 9% of HHs, respectively, pay airfares, while less than 5% do so in Chuuk and Pohnpei. In FSM, 5% of HHs travel abroad by plane and 4% within FSM. The most popular destinations are Guam and Hawaii.

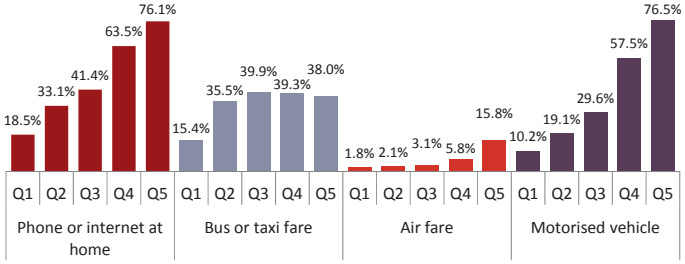
Chart 4: Proportion of HHs who paid for transport services



Affordability of ICT and transportation

In addition to differences between states, different levels of HH income have a huge impact on access to and ownership of ICT and transport goods and services.

Chart 5: Proportion of HHs that pay for communication and transport services and ownership of motorised vehicle, by quintiles



Except for the use of taxi and bus services, access to, and ownership of, ICT and transport items are highly correlated with level of income. Only 18% of HHs in quintile 1 (Q1) have phone (cell or landline) or internet at home, but this increases to 76% for the highest income HHs. A similar gap is observed for ownership of motorised means of transportation (car, motorbike or boat). The correlation between the use of taxi and bus services and income quintile stops at Q3 (medium income) as most high-income HHs (Q3 and Q4) have their own vehicles.

Transport – a source of inequality

HHs in FSM spend a total of US$5.9 million on ICT and US$16.1 million on transport annually. This represents 4.3% and 11.8%, respectively, of total HH cash expenditure. Average annual HH expenditure on ICT is US$360, with US$965 spent on transport.

The proportion of the cash budget spent on ICT is similar across states and quintiles. However this is not the case for transport (Chart 6a and 6b).

Chart 6a: Proportion of cash budget and average annual HH cash expenditure on ICT and transport, by state

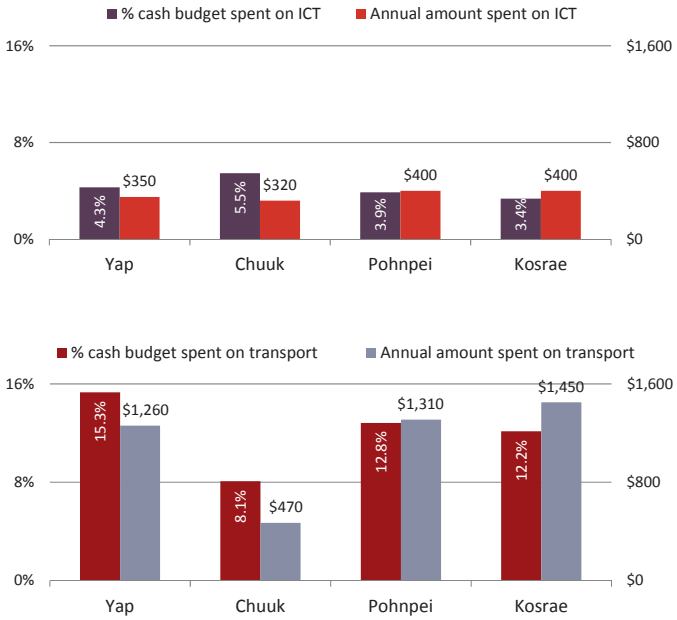
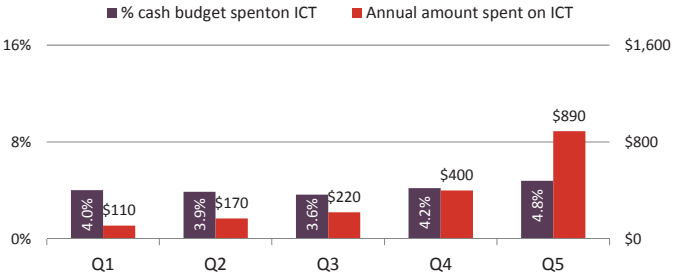
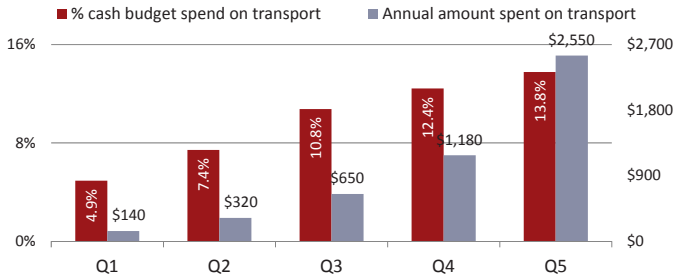


Chart 6b: Proportion of cash budget and annual average HH cash expenditure on ICT and transport, by quintile





Due to the high cost of the main transport items (vehicles and fuel), this domain shows a significant degree of inequality in terms of cash expenditure. On average, high quintile HHs spend 19 times more on transport than low quintile HHs. In the ICT domain, this difference is only 8 times. In terms of overall cash expenditure, HHs in Q5 spend 6 times more than HHs in Q1.

How HH income affects expenditure

Overall, HHs in FSM spend two times more on 'Fuel' (US$7.2 million annually) than on 'Cell phone credit' (US$3.2 million), and three times more than on 'Bus or taxi fare' (US$2.1 million). However, 'Fuel' concerns only one-third of the HH population, while 'Cell phone credit' is paid by 47% of HHs. Almost three-quarters of the HHs that buy 'Fuel' belong to high-income groups (Q4 and Q5) and they spend on average two times more when they refill the car than do low quintile income HHs. This makes 'Fuel' an item mainly limited to rich HHs. Similarly, 'Purchase of vehicles' and 'Air fares', which respectively amount to US$2.9 million and US$2 million (13.1% and 9% of the ICT and transport budget, respectively) are also almost exclusively restricted to high-income quintiles. Of the 850 cars purchased by HHs in 2014, 75% were purchased by Q4 and Q5; 86% of international trips were purchased by the same quintiles.

Chart 7: Breakdown and magnitude of ICT and transport expenditure, by quintile

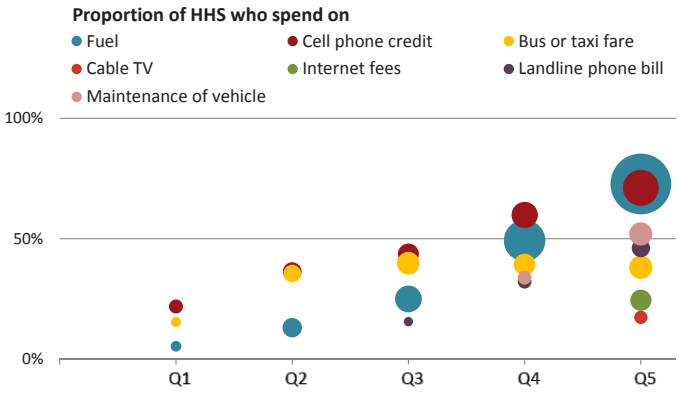


Chart 7 shows, for each quintile, the main ICT and transport expenditure based on the proportion of HHs that incur the expenditure (vertical axis) and the amount spend on each item (size of the circles). For example, in Q2, around 15% of HHs pay

for fuel for vehicles, which represents around one-third of the total HH expenditure on ICT and communication (as the three circles are approximately the same size). For a better understanding, some items do not show up on the chart such as 'Purchase of vehicles' or 'Airfares' even if they show big amount spent they concern few HHs.

From Q1 to Q3, 'cell phone credit' and 'bus and taxi fare' are the most common items of HH expenditure, in terms of number of HHs, though, on average, HHs spend more on 'fuel' in Q2 and Q3. For the high quintiles, cell phone credit remains very common. However, as the majority of these HHs own a vehicle, expenditure on 'fuel' largely dominates and 'maintenance of vehicle' is more significant than in other quintiles. Q4 and Q5 also show a more diverse variety of items consumed, with a high proportion of HHs spending on 'cable TV' or 'internet'. 'Bus and taxi fare' is a very important item for HHs overall, especially from Q2 to Q5, where around 40% of HHs consumed those services and spent an average of between US$24 and US$39 monthly on them. However, 'bus and taxi fare' is relatively negligible for Q4 and Q5 in terms of amount spent compared to other items such as fuel, cell phone, air fare and purchase of vehicles.

Better internet access in Kosrae

At the individual level, an estimated 15% of the population aged 10 and above reported using the internet in the month before the interview, with a peak in Kosrae (Chart 8). Kosrae is the only state where the population accesses the internet more frequently than using a mobile phone.

15%

of the population aged 10+ reported using the internet in the month before the interview

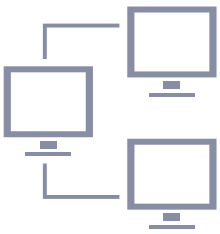
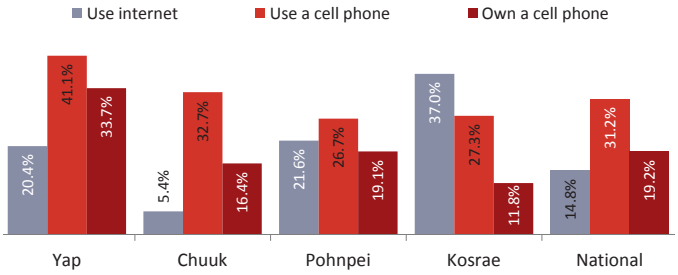


Chart 8 : Individuals aged 10 years and over who use the internet and a cell phone, and who own a cell phone, by state



Home is the main place of internet access (43% of users in FSM) except in Yap where place of work is the main source. School is the main source of internet connection for those aged 10 to 19 years old. In FSM, 7% of this population group accesses the internet at school. Again there is a wide variation between states, with Kosrae reporting 22.6% of 10 to 19 year olds connecting at school compared to only 2% in Chuuk, where schools seem to have very low connectivity.

Overall, only 13% of the population aged 10 to 19 years old accesses the internet. This increases to 18% for young adults (20 to 29 years old), with the proportion decreasing gradually for older population groups.

Only 9% of internet users, who are not connected to the internet at home, declared connecting from another source, meaning that alternative sources of connection are not very common, especially in Chuuk where only 3% of internet users who do not have internet at home connect from another source. The corresponding figures for Yap and Pohnpei are 15% and 12%, respectively. In Kosrae, 26% of the population aged 10+ who do not access the internet at home access it from an alternative source, mainly work and school.

Internet access is highly correlated with income, with less than 5% of the population in low income quintiles accessing the internet compared to 76% of the population in Q5.

Regarding cell phones, 31.2% of the population use a cell phone (in the month before the interview) and 19.2% own one. People aged 40 to 49 years old are most likely to use and own a cell phone (41.7% and 27.8%, respectively).

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Credit: Lyn Lambeth