



FOOD AFFORDABILITY IN THE CITY OF SYDNEY

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ABOUT ISF

The Institute for Sustainable Futures:

A university research institute that creates change towards sustainable futures by conducting independent, project-based research for Australian and international clients.



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We work for **many different clients** including local to federal government, NGOs and businesses, **across a range of areas** including: energy, water, transport, resource futures, social change, including consumption, food and waste.

ABOUT FOOD SECURITY

Food security is an emerging policy issue for the City of Sydney

Food insecurity is not just insufficient amounts of food, but also inadequate nutrition.



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The City is looking to tackle the issue of food security. **City of Sydney contracted ISF** to undertake this research.

Their preliminary research revealed that in the City of Sydney, **food insecurity is not just about going hungry**

- it can also mean **having a diet dominated by cheap, processed and unhealthy foods.**

FOOD SECURITY

Availability

"Sufficient quantities of food available on a consistent basis."

Food systems

Sustainable and equitable production and distribution

Supply

Location of outlets
Variety and quality of items
Available stock

Accessibility

"Having sufficient resources to obtain appropriate foods for a nutritious diet."

Affordability

Cost of food
Disposable income

Access

Adequate time, mobility and transport
Knowledge to make appropriate choices

Appropriate Use

"Use based on knowledge of basic nutrition and care, plus adequate water/sanitation."

Knowledge of nutrition

Knowledge/skills in food handling

Facilities for storing, preparing and cooking

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Food security is **complex and comprised of many different factors**, including availability, affordability and adequate access.

The NSW Council of Social Service recently identified, in its **inaugural Cost of Living report**, that low-income households spend a greater proportion of their budget on food staples such as milk, bread and vegetables, and that food 'is often the item that is skimmed on in a low-income budget'.

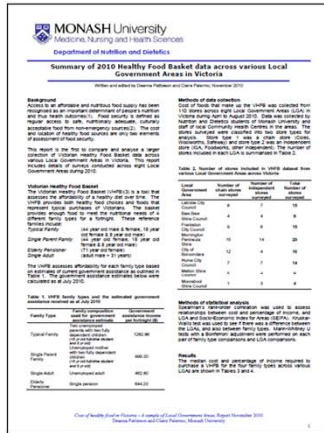
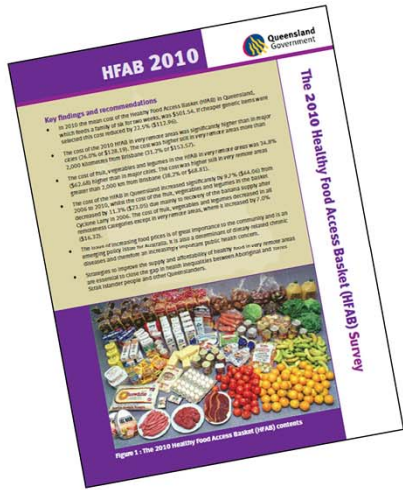
So while it is important not to **reduce** this issue to a question of food cost, **affordability is a key component**.

We use the concept of '**food stress**', the definition of which, emerging in recent literature is where **meeting nutritional requirements costs at least a third of household income**.

The City therefore commissioned this work to increase understanding of the **local dimension of this major barrier to food security**. The findings will provide an evidence base to inform future strategies to address this issue, by both the City of Sydney and other stakeholders.

Diagram source: Adapted from Australian Institute of Family Studies (2011) *Food insecurity in Australia, Communities and Families Clearinghouse Australia practice sheet*.

AIM AND APPROACH



Use methodology from existing studies to enable comparisons

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Australia has **no standard program for monitoring the cost of healthy food.**

The Australian Bureau of Statistics regularly monitors changes in the price of a basket of household goods, including food, to calculate the **quarterly Consumer Price Index**, but the foods are just a list of “typical” not “healthy” items, and they don't represent nutrition requirements or quantities for any particular household.

In response to this gap, Queensland developed a Healthy Food Basket tool, which researchers at Monash amended to better reflect metropolitan cities. The **tool calculates the nutritional requirements** for a healthy diet **for different household sizes**, and **creates a hypothetical ‘basket’ of those goods**. It has been used in Melbourne and wider Victoria, and also across regional areas of NSW.

Our project applies the tool to the City of Sydney Local Government Area (LGA) to examine the cost of healthy food for different household types and household incomes

HEALTHY FOOD BASKET

Enough to feed a household for a fortnight.



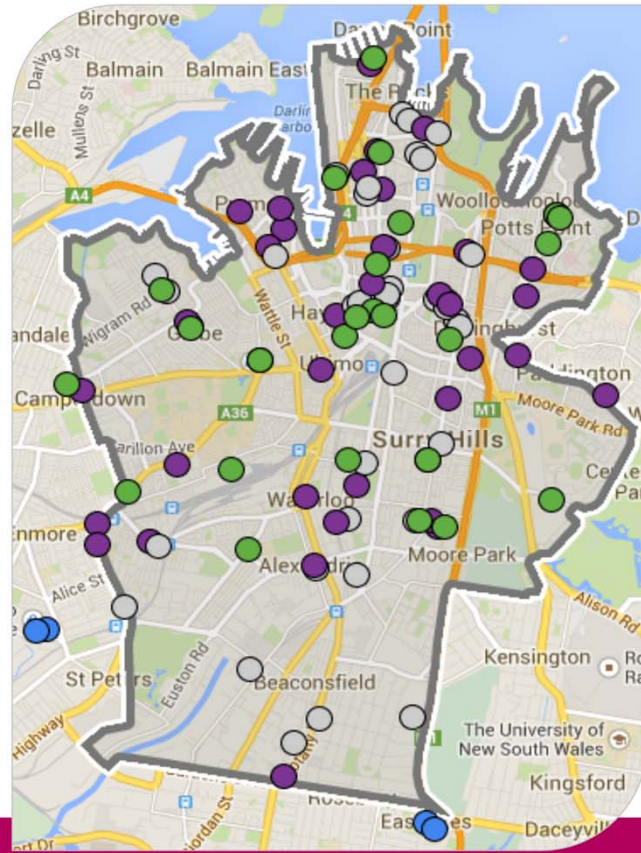
- Fresh fruit / vegetables
- Packaged fruit / vegetables
- Meat and fish
- Dairy and eggs
- Carbs (cereals and grains)
- Energy (ie. oil, butter, sugar).

A **total of 44 items** were included in the Healthy Food Basket, which includes enough variety to **feed a household for a fortnight**.

Our research team visited stores in Sydney and recorded prices for each of these items and then calculated the cost based on the quantity of each item that a household needed.

BASKET COST BY LOCATION

- Supermarkets
- Green grocers
- Excluded stores (Convenience/corner/deli)
- Comparison stores outside LGA boundary



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While we **intended to include all food stores in the LGA**, during the surveys we found that smaller 'convenience' stores did not stock enough of the 44 items in the basket.

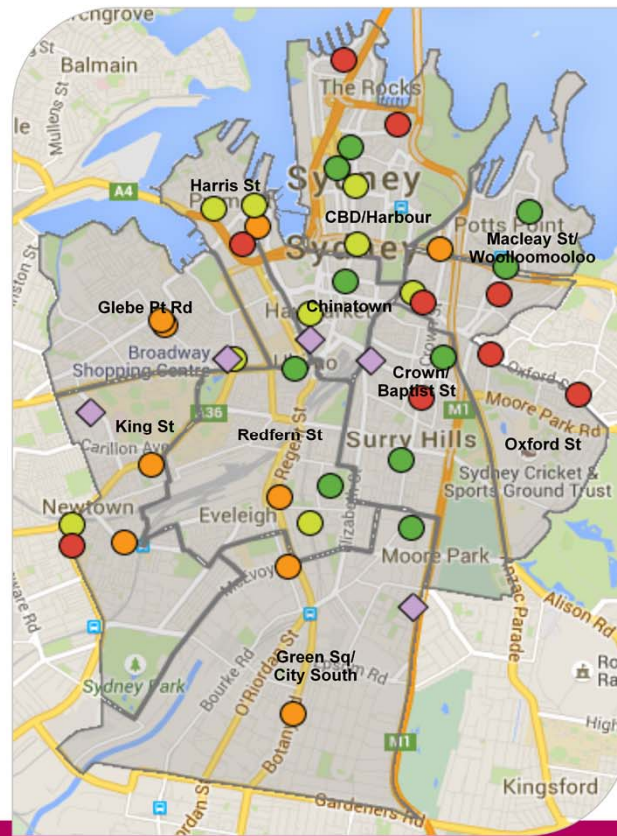
So our analysis is **focused on different kinds of supermarkets**. For the fresh fruit and vegetables in the basket, we **also included greengrocers and produce markets** to provide a comparison.

We also included a small number of supermarkets outside the LGA, to provide another comparison.

In total, **39 supermarkets (green) and 25 green grocers (blue)** were included in analysis, plus 4 outside supermarkets (blue).

BASKET COST BY LOCATION

- Cheapest
- ↑
- ↓
- Priciest
- ◇ No prices



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Looking at just the supermarkets, our research found that the cost of a healthy food basket differs across the City

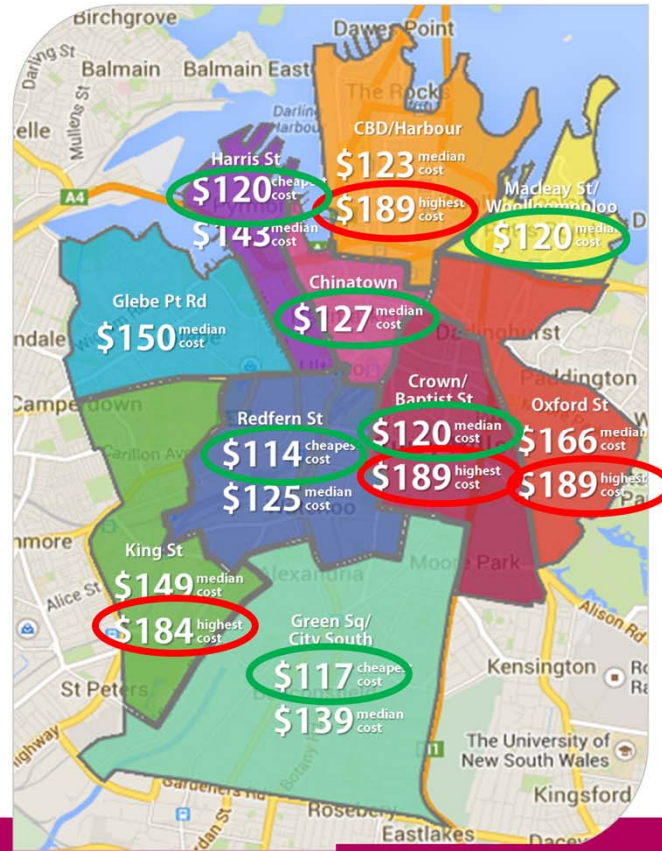
The stores with the **cheapest** baskets (shown in dark green) are mostly located in a **centre spine through the City and the north-east**.

No stores west of Ultimo fall into this cheapest category. There is also a large area with no cheaper stores around **Beaconsfield/Rosebery**. This southern part of the City appears to be generally sparse in terms of food shopping options.

The most expensive stores (top 25%, shown on the map in red) tend to be **concentrated around Paddington and Darlinghurst**.

BASKET COST BY LOCATION

Cost for a **single young adult**
for a fortnight



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This map shows the variation in costs of a basket for a single adult household.

Macleay St/Woolloomooloo and Chinatown/CBD South were notable for having **consistently low basket costs** (maximum \$120 and \$132 respectively using the **single young adult** basket for comparison). Other stores with cheap options are shown in green.

At the other end of the range, Oxford Street had both **consistently mid to high prices** and the highest median basket cost of all villages (\$165). Other high basket costs are shown in red.

Stores in Crown/Baptist Street and CBD/Harbour had the **most varying basket costs**. These villages had amongst the lowest median costs, but also a large proportion of stores in which costs were amongst the highest in the City.

BASKET COST BY HOUSEHOLD



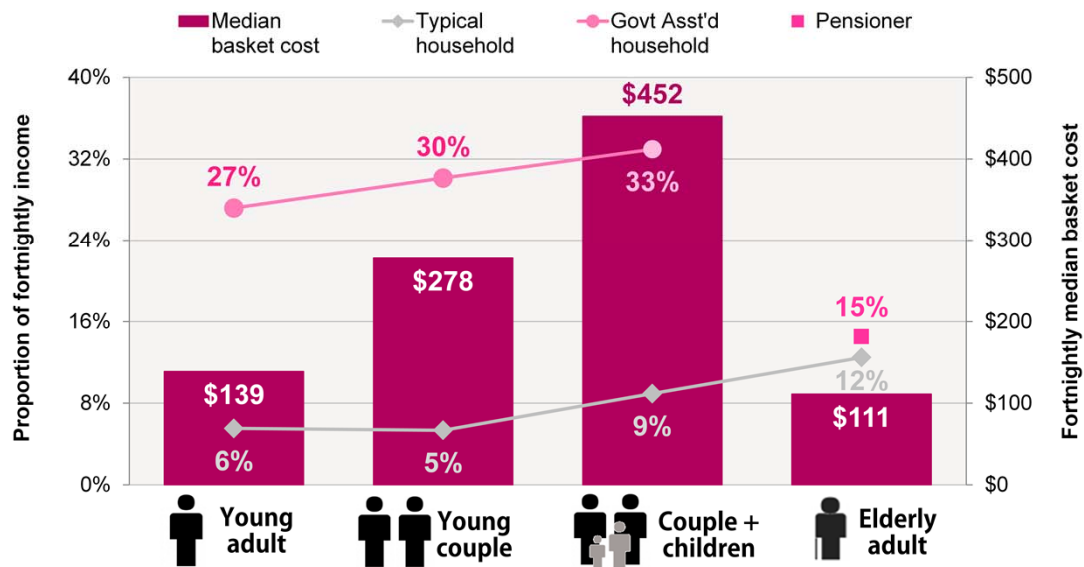
68% of households in Sydney LGA

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Realising that there are different types of households in the City we then considered three other household types, which, when combined, approximate **68% of households in the LGA.**

BASKET COST BY HOUSEHOLD



Because the size and quantity of individual basket items are selected to meet the nutritional needs of different sized households, **basket costs are obviously higher for larger households.**

BASKET COST BY HOUSEHOLD



Young adult

\$139 median cost

6% of a median income

27% of minimum Govt assistance



Young couple

\$278 median cost

5% of a median income

30% of minimum Govt assistance



Couple + children

\$452 median cost

9% of a median income

33% of minimum Govt assistance

Elderly adult



\$111 median cost

12% of a median income

15% of minimum pension

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This is a summary of the results from the previous slide.

It shows that **households with children spend the largest proportion of income on food***.

*Aside from Elderly pensioners on medium income – note that this does not take into account assets like home ownership, etc. and is therefore a more complex story.

BASKET COST BY HOUSEHOLD AND LOCATION

Government-assisted households

Household type	Basket type	Village									
		Crown/ Baptist St	Macleay St/ Woollimlo	Redfern St	CBD/ Harbour	Chinatr/ CBD Sth	Green Sq/ City Sth	Harris St	King Street	Glebe Pt Rd	Oxford St
Young adult	Cheapest	22%	22%	22%	23%	24%	23%	25%	24%	25%	27%
	Median	24%	24%	25%	24%	25%	27%	28%	29%	29%	33%
Young couple	Cheapest	25%	25%	25%	26%	26%	25%	28%	27%	27%	30%
	Median	26%	26%	27%	27%	27%	30%	31%	32%	33%	36%
Couple+ children	Cheapest	26%	27%	27%	27%	28%	27%	30%	29%	29%	33%
	Median	28%	28%	29%	29%	29%	33%	34%	34%	35%	38%
Average		26%	26%	27%	27%	27%	28%	30%	30%	31%	34%
Elderly adult	Cheapest	11%	12%	12%	12%	12%	12%	13%	12%	13%	15%
	Median	12%	12%	13%	13%	13%	15%	15%	15%	15%	17%

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Looking now at basket costs across different parts of the city, for each household, we've shown the median and cheapest basket available in each village.

Orange indicates at or very close to “food stress”. It's a little small, but we can see that for a number of households in a number of villages, purchasing a healthy basket will place that household in food stress.

Comparing the lines for median and cheapest basket, we can see that **for those with adequate mobility/transport, shopping around for cheaper stores can make a difference.**

Even shopping around though, notably, **young couples** cannot find a basket costing less than 30% of their household income in Oxford Street, and a **couple with children** cannot do so in either Oxford St or Harris Street.

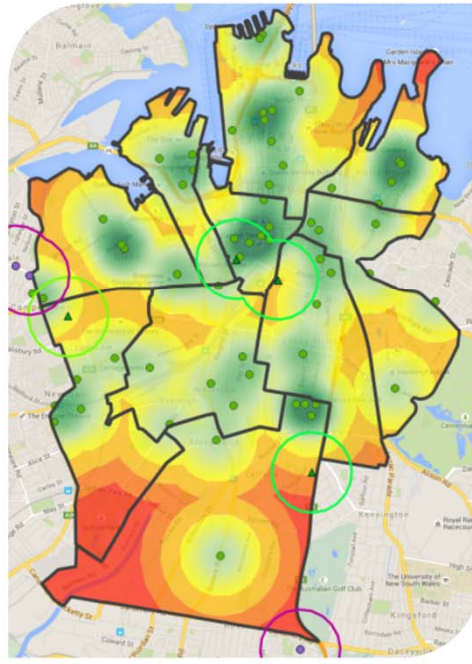
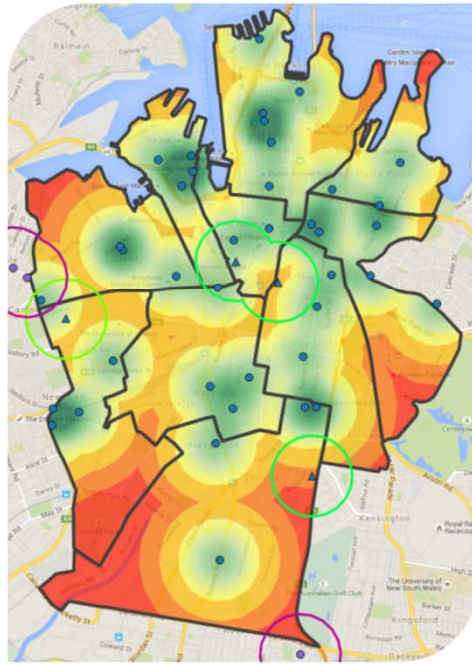
ACCESSIBILITY BY LOCATION

Key

- Supermarkets
- Green grocers + supermarkets
- Outside stores

Distance

- Within 500m
- 500-750m
- 750m-1km
- More than 1km



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Geographical analysis shows that supermarkets and fresh produce outlets are **not accessible to all areas of the City, particularly along the boundaries of the LGA.**

Some areas with concerning lack of access to supermarkets include:

- Darlington (east of Sydney Uni and south of Cleveland St)
- Moore Park (south of Moore Park Rd, west of Centennial Park)
- North Glebe (between Harold Park development and Rozelle Bay)
- Much of Alexandria/Zetland/Rosebery, particularly north of Sydney Park.

Considering just fresh produce, despite the increased number of outlets, accessibility across the City is not much better. Green grocers appear to be mostly clustered in areas where supermarkets already exist, **increasing the choice available in these areas, but not extending accessibility to other areas of the City** (with the exception of Glebe.)

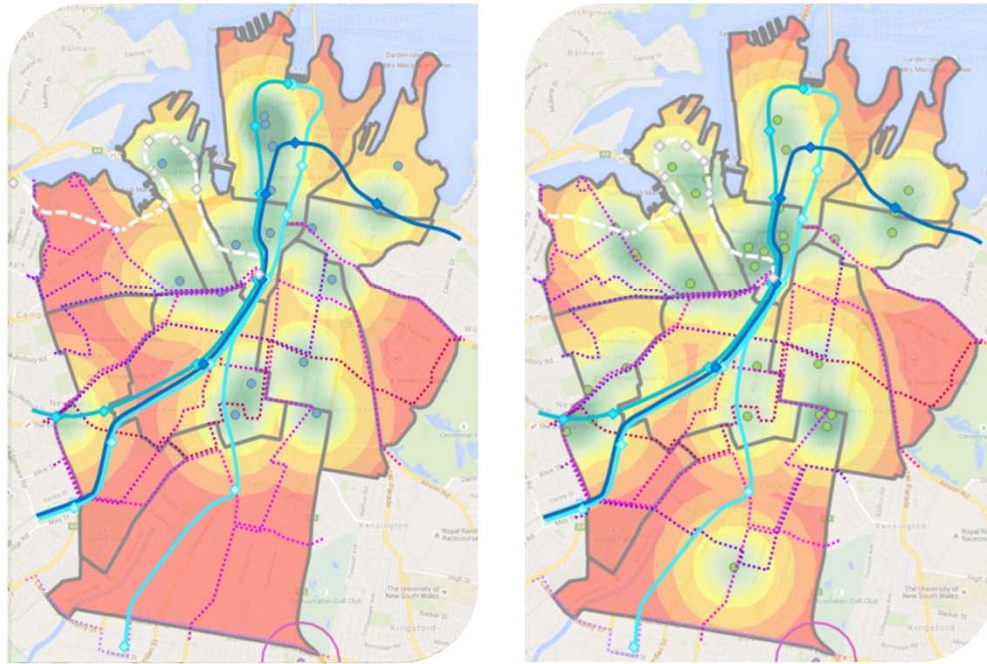
ACCESSIBILITY BY COST AND PUBLIC TRANSPORT

Key

- Supermarkets
- Green grocers + supermarkets
- Outside stores

Distance

- Within 500m
- 500-750m
- 750m-1km
- More than 1km



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As a proxy for affordability, we mapped only the stores with Healthy Food Baskets or fresh produce below the median for the city (the cheaper half of stores). This revealed that **only a small area of the City is within walking distance of affordable healthy food** baskets and fresh produce (areas within the inner yellow circle).

Affordable fresh produce shows slightly more spread across the City, however there are still a number of areas of concern.

Looking at these maps in relation to public transport, we can see that while **existing routes connect most of the City to affordable fresh produce**, they do not help residents of the City's south access an affordable healthy food basket.

WHAT THE RESEARCH TELLS US

- Costs differ considerably across the City
- Most areas of the City have access to cheaper stores
- In some areas, adequate mobility and transport area needed to avoid paying high prices
- Affordability varies greatly for different types of households
- Households with children and Government-assisted households are most likely to be experiencing or approaching food stress
- Accessibility to healthy food baskets is not evenly spread across the City. Areas along the LGA boundary tend to have less access, particularly in the City's south.

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- The cost of a healthy food basket **varies considerably** across the City.
- For **those with adequate mobility/transport**, most areas of the City have access to cheaper stores.
- **Those with limited mobility or transport** will be more affected by living in more expensive areas as they have less ability shop around.
- Affordability (**ie. cost relative to income**) varies greatly for different types of households.
- Some **households with children** and many **Government-assisted households** will be experiencing or approaching food stress.
- Geographical analysis of store locations reveals that supermarkets and fresh produce outlets are not accessible to all areas of the City, particularly stores at the cheaper end of the spectrum.