



Christchurch

ATom Deployment Guide

(revised February 2018)

TABLE OF CONTENTS

Before Arrival	3
Travel Documentation.....	3
Customs.....	4
CDC Recommendations.....	4
Money	4
Schedule.....	4
Daily Schedule.....	4
Site Orientation	5
ESPO Site Support.....	5
Per Diem	5
Lodging.....	5
Transportation.....	5
<i>Driving Requirements and Tips.....</i>	<i>6</i>
<i>Taxis.....</i>	<i>6</i>
<i>Public Transportation.....</i>	<i>6</i>
Communications	7
<i>Internet.....</i>	<i>7</i>
<i>Voice and Text.....</i>	<i>7</i>
Power	7
Arrival	7
Aircraft Access	8
Shipping	8
Health	8
Stores/Restaurants.....	9
Upon Departure	9
Weather	9
Natural Hazards.....	10
Earthquakes	10
<i>During an Earthquake (from cdc.gov)</i>	<i>10</i>
Christchurch Dining and Shopping.....	12
Maps.....	14
Christchurch Local Area	14
Christchurch City Centre	15

BEFORE ARRIVAL

TRAVEL DOCUMENTATION

All visitors to New Zealand require a passport that is valid for at least 3 months after your departure from New Zealand.

People from certain countries (see list below) do not need to apply for a visa before travelling to New Zealand. On arrival in New Zealand, they will be asked to provide:

- travel tickets or evidence of onward travel arrangements, and
- sufficient money to support yourself during your stay

If a person is visiting New Zealand for **three months or less** and is from a visa-waiver country (see list below), this person will not need to apply for a visitor visa before arriving in New Zealand as long as the purpose of the visit is for a lawful purpose.

A person applies for a visitor visa by completing the required “New Zealand Passenger Arrival Card” and if granted entry permission, will also be granted a visitor visa.

A person may stay in New Zealand in accordance with the conditions on their visa.

Visitor visas granted at the airport are electronic, meaning a person may not be given a stamp or label in their passport.

“Visa free” country list:

Andorra	Hungary	Poland
Argentina	Iceland	Portugal
Austria	Ireland	Romania
Bahrain	Israel	Qatar
Belgium	Italy	San Marino
Brazil	Japan	Saudi Arabia
Brunei	Korea (South)	Singapore
Bulgaria	Kuwait	Slovak Republic
Canada	Latvia ²	Slovenia
Chile	Liechtenstein	South Africa
Croatia	Lithuania ²	Spain
Cyprus	Luxembourg	Sweden
Czech Republic	Macau	Switzerland
Denmark	Malaysia	Taiwan
Estonia ²	Malta	United Arab Emirates
Finland	Mexico	United States of America ¹
France	Monaco	Uruguay
Germany	Netherlands	Vatican City
Greece	Norway	
Hong Kong	Oman	

¹ Including nationals of the USA

² A visa waiver does not apply to people travelling on alien's (non-citizen's) passports issued by these countries.

CUSTOMS

There is a \$400 fine for missing information on customs forms for people arriving in NZ. All food must be declared (details below). Fresh fruit, vegetables, and especially honey (even in lip balms) are especially scrutinized.

Are you bringing into New Zealand:

- **Any food:** cooked, uncooked, fresh, preserved, packaged or dried?
- **Animals or animal products:** including meat, dairy products, fish, honey, bee products, eggs, feathers, shells, raw wool, skins, bones or insects?
- **Plants or plant products:** fruit, flowers, seeds, bulbs, wood, bark, leaves, nuts, vegetables, parts of plants, fungi, cane, bamboo or straw, including for religious offerings or medicinal use?

CDC RECOMMENDATIONS

Vaccines recommended by the CDC for travel to New Zealand can be found at <http://wwwnc.cdc.gov/travel/destinations/traveler/none/new-zealand>. The CDC advises that all travelers check the recommended vaccines list and visit their doctor 4-6 weeks prior to travel.

MONEY

The New Zealand Dollar (NZD) is the currency of New Zealand.

There are ATMs all over Christchurch. The most common banks are Westpac, ANZ, BNZ, and ASB.

While New Zealand has converted to chip-and-pin style credit and debit cards, you may still use U.S. cards with magnetic strips. The only slight exception is at 24-hour gas stations. If there is no attendant, you must either pay with a chip-and-pin card or with a magnetic strip card that has a PIN number associated with it.



Most common banks in Christchurch

SCHEDULE

Friday, May 4	Saturday, May 5	Sunday, May 6	Monday, May 7
≈ 16:45 arrival from Fiji	Instrument access	Instrument access	≈ 07:00 departure to Punta Arenas

DAILY SCHEDULE

Schedule details and updates will be sent to the list serve and posted on the ATom website - <https://espo.nasa.gov/atom>.

SITE ORIENTATION

ESPO SITE SUPPORT

Name	Phone	E-mail
Quincy Allison (Site Manager)	+1 650 455 4964	quincy.allison@nasa.gov
Emmett Quigley (Logistics)	+1 415 218 6787	emmett.a.quigley@nasa.gov

PER DIEM

Current Per Diem rates as set by the Department of Defense:

<http://www.defensetravel.dod.mil/site/perdiemCalc.cfm>.

Per diem rates in New Zealand change regularly. Check the DoD per diem website prior to submitting expense reports for changes.

Locality	Maximum Lodging	Local Meals	Local Incidental	Maximum Per Diem	Effective Date
CHRISTCHURCH	186	105	26	317	02/01/2018

* All rates are in US Dollars

LODGING

All ATom participants will stay at the Sudima Hotel Christchurch Airport (Address: 550 Memorial Ave, Christchurch 8053, New Zealand; Website: <http://www.sudimahotels.com/christchurch>). This hotel is across the street from the US Antarctic Program (USAP) facility, which is the main staging area for ATom in Christchurch. ATom participants can make bookings by e-mailing groupreservations@sudimachristchurch.co.nz or calling +64 3 358 3139 to ask for Group Reservations or the Duty Manager. **To access the ATom room block, reference confirmation number 1062325.**

Note that only those personnel who are switching in or out at Christchurch are required to make bookings. All personnel who arrive in Christchurch on the DC-8 and then depart on the DC-8 to Punta Arenas are already booked at the hotel.

There are two washers and two dryers at the hotel (2 NZD/wash and 2 NZD/dry).

ESPO will book a conference room at the Sudima for weather and flight planning briefings. Outside of the times where the room is reserved for these briefings, it will be available for anyone's use. This room has the benefit of unlimited free internet usage, whereas the guest rooms have a limited free allowance before you must pay.

TRANSPORTATION

Rental cars are available at the Christchurch International Airport. Please note that rental cars are not required in Christchurch. As stated above, the USAP facility is directly across the street from the Sudima Hotel Christchurch Airport.

The hotel provides a free local shuttle to its guests by request, but all trips are limited to a 5 km radius. Taxis are an option, albeit an expensive one. Lastly, the Metro bus, which can be picked up on Memorial Avenue, is a convenient option to ride into the city center.

DRIVING REQUIREMENTS AND TIPS

Driving in Christchurch is challenging. Motorists drive on the left side of the road. Often, only cars with manual transmissions (i.e., stick shifts) are available to rent and, regardless of transmission type, the driver's side is on the right. While the population of Christchurch is only about 350,000, the traffic is dense and residents are naturally a bit impatient with drivers who are unaccustomed to driving in these conditions. If you remain undeterred by these facts, here are a few other tips about driving in Christchurch:

- There are several roundabouts in Christchurch and the flow of traffic moves in a clockwise direction.
- In general, if you are turning, give way to all vehicles that are not turning.
- You may not turn left at an intersection when the traffic signals are red.
- A valid driver's license is all you need to legally drive in New Zealand. However, this driver's license must be in English. If not, you must also carry an accurate English translation issued by:
 - a translation service approved by the NZ Transport Agency (a list is available at www.nzta.govt.nz/licence/residents-visitors/translators.html), or
 - a diplomatic representative at a high commission, embassy or consulate, or
 - the authority that issued your overseas license.



Speed limit signs in New Zealand

TAXIS

Taxis in Christchurch are expensive and not recommended. A one-way trip from Sudima Hotel Christchurch Airport to the city center (a little over 6 miles) costs about 40 NZD.

PUBLIC TRANSPORTATION

Metro Bus number 29 goes down Memorial Ave to the city center seven days a week (every half hour, approx. 30 min trip, runs from about 6am - 11pm). You can buy your tickets from the driver. Tickets cost \$3.50 NZD one-way. Stop no. 17102 (just south of the roundabout on Memorial Ave) is closest to Sudima Hotel Christchurch Airport.

Web site (with trip planner): www.metroinfo.co.nz, phone: +64 03 366 8855.

COMMUNICATIONS

INTERNET

There is good Wi-Fi available at Sudima Hotel Christchurch Airport. Up to 2 GB is free of charge. If more than 2 GB are required, then it is 10 NZD per day.

ESPO will reserve a conference room at the Sudima to be used as a workspace. The Wi-Fi network in this conference will not have the 2 GB limitation that is imposed on guests using the in room Wi-Fi.

We recommend turning off data on any mobile device while in New Zealand as data roaming rates are \$2.05 per MB.

VOICE AND TEXT

For AT&T customers, calls placed or received while in New Zealand are charged at \$2.50 per minute (\$1.79 per minute for Verizon customers). Text messages cost \$0.50 to send and \$0.05 to receive.

- The New Zealand country code is 64.
- To call a U.S. number while in New Zealand, dial plus sign, then 1, then 10-digit number.
- To call a local number while in New Zealand, dial plus sign, then 64, then local number.

POWER

The USAP facilities use U.S.-style electrical outlets, and provide 117 volts, 50 Hz & 60 Hz unconditioned power. Science teams may want to consider bringing their own power conditioners and UPSs as appropriate.

In other places, electrical plugs supply 230 volts, 50 Hz, and they use an angled two-pin or three-pin plug, the same as in Australia (see photo). Note that the outlets are typically switched off, and must be manually turned on.



Typical outlet in New Zealand

ARRIVAL

During final descent, all instruments should be shut down and prepared for the NZ government mandated application of disinsection spray in the cargo holds and cabin. After landing in Christchurch, the DC-8 will initially pull in to the terminal building. After the disinsection procedure is complete, science crew will be allowed time on the aircraft at the terminal to postflight their instruments. Once finished on the aircraft, passengers will exit the plane to clear customs and immigration. ESPO and Planebiz personnel will escort any ground crew needing to return to the aircraft. *Due to crew day limitations, there will be no access to the aircraft after it is towed to its final parking spot near the USAP facility.*

The Sudima Hotel has a hotel shuttle that can be called from the courtesy phone at the airport. Otherwise, the hotel is a short walk from the airport.

AIRCRAFT ACCESS

ESPO will issue everyone on the deployment an ATom ID card in Palmdale. This card is your official credential to work and you will not be allowed access to the facilities or flight line without it. Orchard Road and the ramp divide the USAP outside area and are fully gated. All personnel will either enter the facility through a 24-hour manned security gate or via the pedestrian cypher gate. This will be determined closer to the deployment. The ESPO site manager will provide security with a list of names of personnel allowed access to the USAP facility.

There is a gate that separates the USAP facilities from the airport ramp. To gain access, you need a reflective safety vest with your ATom badge visibly displayed. You **MUST** be wearing a reflective vest at all times while on the flight line. There will be a box of vests flying on the DC-8 that are available to all.

Rules governing access are:

1. ATom personnel must wear their ATom ID cards displayed at all times when entering the USAP operational areas and tarmac areas of the aerodrome.
2. ATom personnel must not move into or walk through the Security Enhanced Area of any other building, tarmac area, or sterile area of Christchurch International Airport, unless fully escorted at all times by a full airport identity card holder, and only then for the purpose of their specific work.
3. ATom personnel can only enter the security area of the aerodrome via the USAP gate and hangar for the purposes of our duties as outlined in NZ Civil Aviation Rule (CAR) Part 19.357.

SHIPPING

There will be both a sea and air shipment from Palmdale to Christchurch. We will have a few days on the ground to swap out empty gas bottles for full ones and other equipment necessary. All empty bottles and other equipment that need to return to Palmdale should be identified at this time. ESPO will provide logistical support for all returns going via the sea container and anything that requires air shipping.

Please coordinate all other unscheduled shipments to and from Christchurch with the ESPO site manager, Quincy Allison (contact info above).

HEALTH

In New Zealand, there are tiers of medical care depending on your situation:

In the case of a life-threatening emergency, call 111 for an ambulance. You will be taken directly to Christchurch Hospital.

If your condition is not life-threatening:

1. For general care, go to the Riccarton Clinic. This drop-in clinic is open daily until 8pm. Address: 4 Yaldhurst Road, Riccarton 8041; Hours: Every day, 0800 - 2000; Phone: 64 (3) 343 3661; Website: <http://www.riccartonclinic.co.nz>
2. For 24-hour urgent care, go to Bealey 24 Hour Surgery. In particular, it is recommended to go here for accident related injuries such as sprains, cuts, or fractures. They have a specialized fracture service and people are encouraged to go here instead of Christchurch Hospital for broken bones. Address: Cnr Bealey Ave and Colombo Street, Christchurch 8014; Hours: 24/7; Phone: 64 (3) 365 7777; Website: <http://www.24hoursurgery.co.nz>

ATom participants should check their insurance policy prior to their departure from Palmdale to ensure they have adequate coverage internationally.

STORES/RESTAURANTS

Christchurch is a modern city with plentiful dining and shopping options. Adjacent to Sudima Hotel Christchurch Airport is newly opened Spitfire Square with several restaurants and a grocery store (Countdown, open Mon - Sun: 7am - 10pm, <http://www.countdown.co.nz>).

More information about other stores and restaurants can be found in the table below.

UPON DEPARTURE

Preflight for the departure to Punta Arenas will begin approximately three hours prior to takeoff.

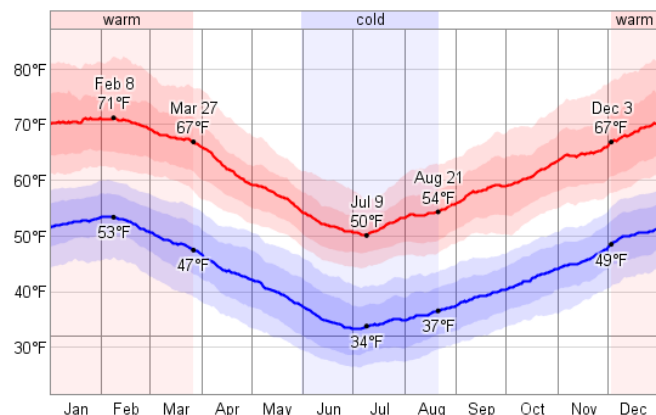
Customs and immigration officials will be at the aircraft prior to departure to out-process all personnel.

You are responsible for obtaining the food you want to take on the outbound flight. There is a Countdown Supermarket in Spitfire Square, adjacent to the Sudima Hotel Christchurch Airport.

WEATHER

Over the course of a year, the temperature in Christchurch typically varies from 33°F to 71°F and is rarely below 26°F or above 82°F. The warm season lasts from December 3 to March 27 with an average daily high temperature above 67°F.

During the warm season, which lasts from December 3 to March 27, there is a 45% average chance that precipitation will be observed at some point during a given day. When precipitation does occur it is most often in



The daily average low (blue) and high (red) temperature with percentile bands (inner band from 25th to 75th percentile, outer band from 10th to 90th percentile).

the form of moderate rain (52% of days with precipitation have at worst moderate rain), light rain (26%), and drizzle (16%).

NATURAL HAZARDS

Earthquakes are the main natural hazards in New Zealand.

The 2010 and 2011 earthquakes in Christchurch caused widespread damage throughout the city and its outlying suburbs. Reconstruction of the city center is still ongoing.

EARTHQUAKES

Please review the Earthquake preparedness guidelines from the CDC below before the deployment.

If a major earthquake occurs during our stopover in New Zealand,

- At airport - The team will follow the USAP emergency plan.
- At hotel or elsewhere - Shelter in place using the CDC guidelines.

Following an earthquake, all team members must check in with the ESPO site manager when it is safe to do so (either in person or by phone). The ESPO site manager will do a head count to ensure that everyone on the team is safe and accounted for.

DURING AN EARTHQUAKE (FROM CDC.GOV)

Indoor Safety

If you are inside, stay inside. DO NOT run outside or to other rooms during shaking.

In most situations, you will reduce your chance of injury from falling objects and even building collapse if you immediately:

- DROP down onto your hands and knees before the earthquake knocks you down. This position protects you from falling but allows you to still move if necessary.
- COVER your head and neck (and your entire body if possible) under the shelter of a sturdy table or desk. If there is no shelter nearby, get down near an interior wall or next to low-lying furniture that won't fall on you, and cover your head and neck with your arms and hands.

HOLD ON to your shelter (or to your head and neck) until the shaking stops. Be prepared to move with your shelter if the shaking shifts it around.

DO NOT stand in a doorway. You are safer under a table. In modern houses, doorways are no stronger than any other part of the house. The doorway does not protect you from the most likely source of injury—falling or flying objects. Most earthquake-related injuries and deaths are caused by falling or flying objects (e.g., TVs, lamps, glass, bookcases), or by being knocked to the ground.

You can take other actions, even while an earthquake is happening, that will reduce your chances of being hurt.

- If possible within the few seconds before shaking intensifies, quickly move away from glass and hanging objects, and bookcases, china cabinets, or other large furniture that could fall. Watch for falling objects, such as bricks from fireplaces and chimneys, light fixtures, wall hangings, high shelves, and cabinets with doors that could swing open.
- If available nearby, grab something to shield your head and face from falling debris and broken glass.
- If you are in the kitchen, quickly turn off the stove and take cover at the first sign of shaking.

If you are in bed, hold on and stay there, protecting your head with a pillow. You are less likely to be injured staying where you are. Broken glass on the floor has caused injury to those who have rolled to the floor or tried to get to doorways.

Outdoor Safety

If you are outside, stay outside, and stay away from buildings utility wires, sinkholes, and fuel and gas lines.

The area near the exterior walls of a building is the most dangerous place to be. Windows, facades and architectural details are often the first parts of the building to collapse. Also, shaking can be so strong that you will not be able to move far without falling down, and objects may fall or be thrown at you. Stay away from this danger zone--stay inside if you are inside and outside if you are outside.

If outdoors, move away from buildings, utility wires, sinkholes, and fuel and gas lines. The greatest danger from falling debris is just outside doorways and close to outer walls. Once in the open, get down low (to avoid being knocked down by strong shaking) and stay there until the shaking stops.

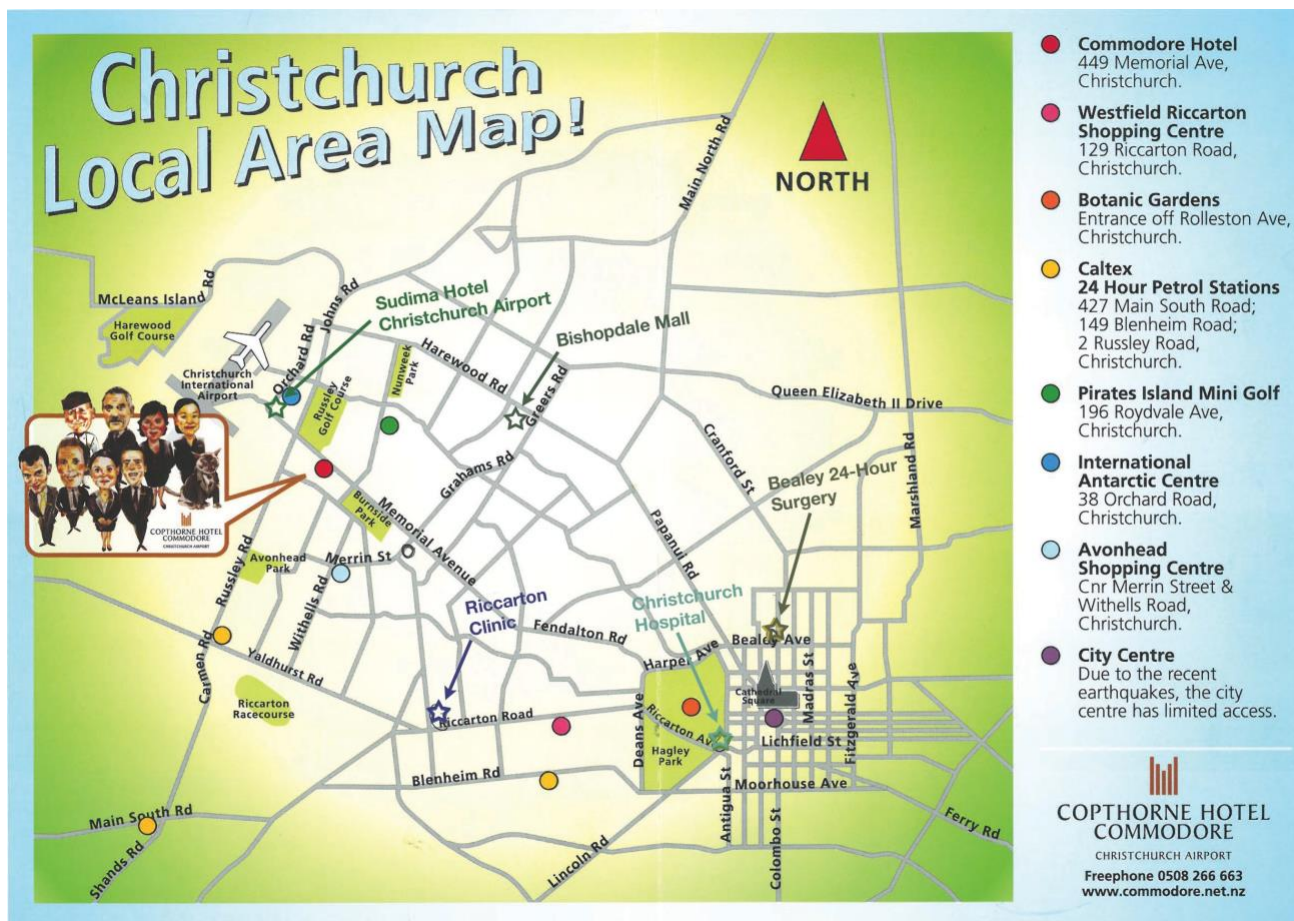
CHRISTCHURCH DINING AND SHOPPING

RESTAURANTS				
Place	Address	Hours	Phone Number	Notes
Monteith's Brewing Co.	53 Merrin St, Avonhead, Christchurch 8042	Sun - Thu, 0930 - 2300; Fri - Sat, 0930 - 2400	64 (3) 358 8184	pub & restaurant
Sushi Time	Avonhead Mall, Merrin Street, Christchurch 8042	Mon - Wed, 0900 - 1800; Thu, 0900 - 1900; Fri - Sat, 0900 - 1800; Sun, 1000 - 1600	64 (3) 358 5096	Japanese restaurant
Subway	224 Withells Rd, Avonhead, Christchurch 8042	Daily, 0700 - 2100	64 (3) 357 1030	chain sandwich shop
Harrington's Café, Bar & Restaurant	808 Main N Rd, Belfast, Christchurch 8051	Mon - Wed, 1000 - 2000; Thu, 1000 - 2100; Fri - Sat, 1000 - 2200; Sun, 1100 - 1900	64 (3) 323 8898	pub & restaurant
Pomeroy's Old Brewery Inn	292 Kilmore St, Christchurch 8011	Tue - Thu, 1500 - 2300; Fri - Sat, 1200 - 2300; Sun, 1200 - 2200	64 (3) 365 1523	pub & restaurant in the city centre (great!)
Tavern Harewood	333 Harewood Road, Bishopdale 8053		64 (3) 359 9075	pub & restaurant
Korea House	133 Farrington Ave, Bishopdale 8053	Mon - Sat, 1130 - 2200; Sun, 1700 - 2200 (closed Wed)	64 (3) 366 8949	Korean restaurant
Abalone Thai	129 Farrington Ave, Bishopdale 8053	Lunch: Tue - Sat, 1130 - 1400; Dinner: Tue - Sun, 1700 - 2130	64 (3) 360 2168	Thai restaurant
GROCERIES/GENERAL				
Place	Address	Hours	Phone Number	Notes
Countdown - Hornby	17 Chappie Pl, Hornby, Christchurch 8042	Daily, 0700 - 2300	64 (3) 344 0450	supermarket
Countdown - Avonhead	Cnr Withells Road & Merrin Street, Avonhead, Christchurch 8042	Daily, 0700 - 2100	64 (3) 358 4765	supermarket
New World Supermarket Bishopdale	42 Bishopdale Court, Bishopdale 8053	Daily, 0700 - 2100	64 (3) 359 8998	supermarket

HARDWARE/OFFICE/ELECTRONICS				
Place	Address	Hours	Phone Number	Notes
Mitre 10 Mega	370 Main South Road, Hornby, Christchurch 8042	Mon - Fri, 0700 - 1900; Sat, 0700 - 1800; Sun, 0800 - 1800	64 (3) 349 8497	giant Home Depot-style hardware store
Harvey Norman	14 Chappie Pl, Hornby, Christchurch 8042	Sat - Wed, 0900 - 1730; Thu - Fri, 0900 - 1930	64 (3) 344 8100	furniture store that has a large electronics section with a wide variety of computer peripherals
Mitre 10 - Bishopdale	135 Farrington Ave, Bishopdale 8053	Mon - Fri, 0800 - 1730; Sat, 0830 - 1730; Sun, 0900 - 1730	64 (3) 359 5443	Home Depot-style hardware store
PHARMACIES/MEDICAL				
Place	Address	Hours	Phone Number	Notes
Avonhead Pharmacy	Avonhead Mall, Merrin Street, Christchurch 8042	Mon - Wed, 0900 - 1800; Thu, 0900 - 1900; Fri - Sat, 0900 - 1800; Sun, 1000 - 1600	64 (3) 358 5449	pharmacy
Unichem Pharmacy	37 Bishopdale Court, Bishopdale 8053	Mon - Fri, 0830 - 1800; Sat, 0930 - 1600	64 (3) 359 8302	pharmacy
OTHER				
Place	Address	Hours	Phone Number	Notes
Piccadilly Books	Avonhead Mall, Merrin Street, Christchurch 8042	Mon - Sat, 0800 - 1830; Sun, 0900 - 1630	64 (3) 358 4835	bookstore

MAPS

CHRISTCHURCH LOCAL AREA



CHRISTCHURCH CITY CENTRE

CENTRAL CITY

