

International Roaming

TELUS has supplied the University of Alberta with a modernized pricing model referred to as “full transparency” pricing. The University of Alberta is currently being charged for International Roaming using a fixed per megabyte rate of \$9.00. International travel packages are now available for Pay Per Use as the basic rate is still higher than the packages.

Travel Tips

Managing Data Usage: Using Wi-Fi hotspots for data access is the first and best option for reducing wireless international roaming costs. Knowing how your device is set up and operating is the second option for managing wireless roaming costs. It is important to understand how your device is connecting to the network to ensure that applications and services are not running on your device while roaming and more.

1 MB usage	Smartphones (Includes BB 10 devices)	BlackBerry (OS 7.0 or earlier)	Mobile Internet Keys
Text only emails	50	400	90
Emails with attachments	2	50	5
Web pages	1-2	10	4

- All smartphones (excluding pre OS10 BlackBerry models) will automatically download all emails if the customer has their email account provisioned on their device. This will use data even if they do not open or read the messages on the device.

Topic	Description	Suggestions
Application Settings on personal computers	Manage applications used on your wireless connection by configuring the settings to use a minimal amount of data.	<ul style="list-style-type: none"> ▪ Configure Microsoft Outlook to download e-mail headers only (i.e., not the full e-mail) ▪ Configure Microsoft Outlook to retrieve e-mail less frequently or to manual retrieval only ▪ Set the browser homepage (e.g., Internet Explorer) to a website with minimal graphics (i.e., Google).
Background Applications	<p>Some applications connect to the Internet and transfer data in the background without any indication to a laptop user.</p> <p>Smartphone examples:</p> <ul style="list-style-type: none"> ▪ Push Email accounts if not disabled (emails forwarded automatically to the phone). ▪ Twitter/Facebook feeds that update automatically. 	<ul style="list-style-type: none"> ▪ Set software updates: <ul style="list-style-type: none"> • Allows customers to control when updates are downloaded. • Specify the interval it updates at (i.e. every 15 mins or 30 min). • Disable automatic updates. ▪ Exit unnecessary background applications: Reduces the risk of applications unknowingly connecting to the Internet when using the TELUS wireless data connection.

	<ul style="list-style-type: none"> ▪ Location Based Services ▪ Some applications such as Poynt by default are always either using GPS or network triangulation to pinpoint the phones position. ▪ News and Weather Apps ▪ BBM and Instant Messaging status updates <p>Laptop examples:</p> <ul style="list-style-type: none"> ▪ Microsoft Windows/anti-virus software automatically check for the latest software updates or virus definitions. ▪ Media players connect to the Internet to get information on the media file that is playing. 									
Data Monitoring	Customers can track the amount of data they are using through their wireless connection to better understand their usage habits.	<ul style="list-style-type: none"> ▪ Device Connection Software: Use the data counter that is typically included with each Mobile Computing device (e.g., Mobile Internet Key or mobile phone with data cable). Data counters track the amount of data sent and received during the active connection and record the data usage on recent connection sessions. Examples of connection software include the following: <ul style="list-style-type: none"> • Watcher™: Included for Sierra Wireless AirCard 580 • Third-party software: Third-party tools are available via the Internet if the included connection software does not satisfy the customer's needs. Search the internet for these key words: Network Traffic Monitor. • Note: these applications are not supported by TELUS. Users might have to try a few third-party connection tools before finding an accurate one. 								
High Data Use Activities	Internet activities such as streaming content consume a significant amount of data and bandwidth on a customer's wireless connection.	<table border="1"> <thead> <tr> <th data-bbox="760 1520 1094 1570">Type</th> <th data-bbox="1094 1520 1430 1570">Data usage</th> </tr> </thead> <tbody> <tr> <td data-bbox="760 1570 1094 1675">Video streaming & videoconferencing</td> <td data-bbox="1094 1570 1430 1675">1 minute YouTube-quality video consumes up to 2-4 MB.</td> </tr> <tr> <td data-bbox="760 1675 1094 1730">Audio streaming</td> <td data-bbox="1094 1675 1430 1730">Approximately 1MB/minute</td> </tr> <tr> <td data-bbox="760 1730 1094 1885">Photos</td> <td data-bbox="1094 1730 1430 1885">Sending/downloading 10 photos consumes on average 5 MB and more. Usage will depend on photo quality and</td> </tr> </tbody> </table>	Type	Data usage	Video streaming & videoconferencing	1 minute YouTube-quality video consumes up to 2-4 MB.	Audio streaming	Approximately 1MB/minute	Photos	Sending/downloading 10 photos consumes on average 5 MB and more. Usage will depend on photo quality and
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			resolution.
		Maps	Navigation apps retrieve map images and consume 1 MB quickly.
		Web surfing	Web pages vary in size and consume more data when there are graphics / images in them.
		Facebook	Status updates don't take up much data, but sending and viewing photos will.
		Email	Minimal data consumed unless attachments like photos or spreadsheets are included.
		Twitter	Minimal data consumed unless you follow a lot of people and click on links and photos then usage adds up.
		Weather apps	Small apps that report simple things, such as weather forecast, will use less data compared to going to a web page for the same information.