

EXHIBIT 1

MY VERIZON WIRELESS

WIRELESS FRIENDS & FAMILY **SAFE GUARDS** CONTACTS MY MEDIA

My Bill - Acct:

Amount Due	Last Payment	View Bill
6/7/10	5/27/10	Autopay Date: 7/6/10
\$235.82	\$0.02	Change

PARENTAL CONTROLS CALL & MESSAGE BLOCKING INTERNET SPAM BLOCKING



Usage Controls

- Set voice & message allowances
- Assign trusted numbers
- Block numbers
- Restrict access

[Manage Now](#)

Family Locator

- Locate your family
- Set up arrival time & departure dates
- Text your family easily at no additional cost

[Learn More](#)

Content Filters

Protect your family with age appropriate content filters for music, videos, and the internet.

No Additional Charge[View/Edit Settings](#)

Service Blocks

You can restrict purchase of data services including Ringback Tones and application downloads.

No Additional Charge[Add/Remove Blocks](#)

ACCOUNT ACTIONS

- [Make a Payment](#)
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- [Change Phone Number](#)
- [Suspend / Resume Service](#)
- [Buy Accessories](#)
- [Change Calling Plan](#)
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- [Activate Phone](#)
- [Assign Account Managers](#)
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WIRELESS SUPPORT

LINE

[Phones & Devices](#)[Services](#)[Order Status](#)[Refer Friends & Family](#)

WIRELESS MESSAGING

[Send Text Message](#)[Send Picture & Video Message](#)[Send Animated Message](#)[New Alert](#)FAQs | [POPULAR FORUM THREADS](#)

How do I check my balance?

Parental Controls

Overview

Usage Controls

Family Locator

Content Filters

Take Control

Control how your family uses their phone and devices with Usage Controls, Family Locator and Content Filtering.

Sign Up \$4.99 per line for Usage Controls

Already have Parental Controls? [Sign in now](#)



Usage Controls

Take control of your family's cell phone usage with:

- **Voice & Messaging Allowances**

Set allowances for your family's voice minutes and text messages.

- **Time Restrictions**

Set times of the day when your family members are prevented from calling, messaging, or accessing data, while always communicating with trusted numbers.

- **Block Numbers**

Block unwanted calls and messages from being sent or received.

- **Trusted Numbers**

Always stay connected despite Usage Controls restrictions.

\$4.99 | Monthly Access per line

[Learn More](#)

Sign Up

Family Locator

Easily locate your family member from your Verizon Wireless device or on the Web - all in real time using:

- Locate On Demand
- Arrival and departure updates
- Scheduled Updates
- Free Family Messaging

\$9.99 | Monthly Access per line

[Learn More](#)

Sign Up

Content Filters

Only Verizon Wireless offers age-appropriate content filters, which are easy to change as your child matures, protecting your family when they use:

- V CAST Music
- V CAST Video
- Mobile Web 2.0
- short code-based messaging campaigns

FREE!

[Learn More](#)

Sign Up

Usage Controls

Overview

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Help: [Home](#)

The comfort of control.

Usage Controls gives you the tools to control your child's cell phone usage.

[Learn More](#)

\$4.99 Monthly Access per line

[Add to Your Account](#)



[What Are Usage Controls?](#)

[How It Works](#)

[Get Usage Controls](#)

Get the Full Usage Controls Suite



Usage Allowance

Usage Allowances enable you to set limits for voice minutes and messages that can be used during a billing cycle.



Time Restrictions

Time Restrictions limit and control your child's use of his or her cell phone during a certain time of day or day of week.



Blocked Numbers

Blocked Numbers are phone numbers that are restricted from calling or messaging your child at any time. Your child will also not be able to call or message those numbers at any time.



Trusted Numbers

Trusted Numbers are phone numbers that are available for calling and messaging regardless of Usage Allowances or Time Restrictions.

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Usage Allowance

[Help: Usage Allowance](#)

Set limits and view usage

Minutes

Messages

Minutes Allowance

Keep track of the monthly anytime minutes your child is using. This allowance applies to the minutes included in your calling plan and usage associated with applicable Friends & Family[®] calling. It does not apply to Unlimited Mobile to Mobile and Unlimited Night and Weekend Minutes.

Set up a minute allowance below, and when your child reaches the allowance you will receive a free text message. By setting an allowance threshold you are not restricting the number of anytime minutes your child can use; rather you are setting an alert to inform you of your child's usage. Your child will also receive free text alerts when he/she is within 15 minutes of their allowance threshold and again when they reach the allowance threshold you set.

Anytime Minutes Usage Summary - This billing cycle (6 days remaining)



Set Anytime Minutes Allowance - 1400 total minutes in your plan

	Not Set	Set Minutes Allowance	Current Usage
<input checked="" type="checkbox"/> Test 2.0_0328	<input checked="" type="radio"/>	<input type="radio"/> <input type="text" value=""/> Minutes	3 Mins

0 Total Minutes Allowance

Cancel

Save Changes

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Usage Allowance

Help: [Usage Allowance](#)

Set limits and view usage

[Minutes](#)

Messages

Messages Allowance

Set a limit on the number of text, picture and video messages your child is allowed to send and receive each month. This limit applies to accounts on a pay as you go messaging plan or messaging bundle with an included number of messages. For example, if your child has a \$10 monthly access bundle that includes 500 messages and Unlimited "IN", the message allowance would apply to the 500 messages only.

Your child will receive free text alerts when he/she is within 15 messages of their allowance threshold and again when they reach the allowance you set. If the message limit is reached, you will be notified via a free text message and your child will no longer be able to send or receive messages. This restriction does not apply to phones on your wireless account the Trusted Numbers list that you will be able to send and receive messages to each other at all times.

Messages Usage Summary - This billing cycle (8 days remaining)

0 Messages Used / Pay As You Go Plan

Set Messages Allowance - Pay As You Go Plan

	Not Set	Set Messages Allowance	Current Usage
<input type="checkbox"/> Test 2.0_0328	<input checked="" type="radio"/>	<input type="radio"/> <input type="text"/> Messages	0 Msgs

Cancel

Save Changes

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Time Restrictions

[Help: Time Restriction](#)

Set up periods of time during the day or night when your child is not allowed to use his or her cell phone.

How Time Restrictions Work

Time restrictions allow you to set periods of time during the day or night (for example school hours or bed time) when your child is not allowed to use his or her cell phone. By default, time restrictions will prevent calling, messaging and downloading content during designated periods.

During time restricted periods, your child will still be able to communicate with numbers in your Trusted Numbers list, both placing/receiving calls and sending/receiving text, picture, and video messages.

Note: Certain data services and applications, such as Chaperone Family Locator, Navigator, and Backup Assistant, will always be allowed, even during time restricted periods. Time Restriction settings may not work on devices with "always on" data connections (such as the Android devices) and may not restrict data usage regardless of whether you have established a Time Restriction for one or more of those devices on your account.

Set Time Restrictions- You can add up to 10 restrictions for each account member. Restrictions spanning midnight will be counted as two restrictions. Restrictions must all be set for the same time zone.



Test 2.0_0328's Time Restrictions

[+ Add Restrictions](#)

Days*

Mo Tu We Th Fr Sa Su

Weekdays

Weekends

Starts*

12:00 am

Ends*

12:00 am

Time Zone*

Eastern

Do not adjust for Daylight Savings Time

Note: Time Zone setting will apply to all restrictions for Test 2.0_0328

[Cancel](#)

[Save](#)

Mo, 12:00AM - 12:15 AM

[X Delete](#) | [Edit](#)

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Block Phone Numbers

[Help: Blocked Numbers](#)

Block unwanted calls and messages by entering phone numbers that are not allowed to call or to message your child. Your child will also not be able to call or send messages to those same numbers.

- Block up to 20 phone numbers.
- Block calls from private and restricted numbers as well as outgoing calls to 411 directory assistance.
- 911 and account member phone numbers cannot be placed on the block list.
- You will not receive notification of attempted calls placed by phone numbers in your blocked number list.

Set Blocks - You can block up to 20 numbers for each account member subscribed to Usage Controls.



Test 2.0_0328's Blocks

+ Add Blocks

Block Restricted, Unavailable and Private Numbers

Block Outgoing 411 Directory Assistance Calls

Name

Phone Number*

Add

Cancel

<input type="checkbox"/>	Name	Phone Number
<input type="checkbox"/>	test	123-456-7890

X Delete

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Trusted Numbers

Help: [Trusted Numbers](#)

Create a list of trusted numbers who can always be contacted.

Allow Incoming and Outgoing Communication

Numbers on the Trusted Number list are able to call and message with your child regardless of usage allowances and time of day restrictions.

- You can specify up to 20 numbers for each account member.
- You can include phone numbers of other members on the account, those on your Friends and Family list, or any other landline or wireless numbers.
- Remember, your child can always reach 911.

Communication with Trusted Numbers is always allowed, but may incur overage charges in accordance with your calling and/or messaging plans.*

Set Trusted Numbers - Add Account Members or any other numbers to your Trusted List.



Test 2.0_0328's Trusted Numbers (None) [+ Add Trusted Number](#)

Secondary Line :

Name 
Phone Number*

--	--	--

[Add](#) [Cancel](#)

*Voice usage associated with non-Verizon Wireless trusted numbers will count toward any Usage Controls allowances that you've designated, unless they are placed during free calling periods (i.e. nights & weekends). Most messages (except those associated with Mobile messaging) will count toward your Usage Controls allowances. Premium Messages do not count towards Usage Controls allowances.

EXHIBIT 2

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International Services

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- [In what countries does Verizon Wireless offer Global Phone Service?](#)
- [What phones are Global Ready?](#)

More

Calling internationally from the U.S.
Traveling outside of the U.S.

France

[Global Phone](#)

GSM Standard Roaming Per Minute Rate	\$1.29/min
GSM Value Plan Roaming Per Minute Rate	\$0.99/min

[GlobalEmail \(\\$64.99/mo with Qualifying Voice Plan\)](#)

Monthly Allowance (Rate)	Unlimited
Pay Per Use Plan	\$0.02/KB

[GlobalAccess](#)

Supported Mobile Networks

View Compatible Voice Devices: [Dual Band GSM 3G \(High Speed Data\)](#)

View Compatible E-Mail Devices: [Dual Band GSM 3G \(High Speed Data\)](#)

View Compatible Internet Access Devices: [Dual Band GSM 3G \(High Speed Data\)](#)

View Compatible GlobalAccess Connect Devices: [CDMA Dual Band GSM Quad Band GSM 3G \(High Speed Data\)](#)

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[Map View](#)
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Calling internationally from the U.S.

[Make calls to other countries](#)

Use your Verizon Wireless phone to make calls to destinations outside of the U.S.

[Send text messages to other countries](#)

Use your Verizon Wireless phone to send text messages to non-US mobile phone numbers in other countries.

Send picture & video messages to other countries

Your Verizon Wireless phone can now send picture and video messages to non-U.S. mobile phone numbers in other countries.

Traveling outside of the U.S.

Use any Verizon Wireless phone

Make calls from popular travel destinations like Mexico, Canada and more than 40 countries.

Use an enhanced Verizon Wireless global phone

Use the same phone and number for wireless service in the U.S. and in more than 220 countries.

Stay connected to your email while traveling

Use one device for both voice and email while traveling in the U.S. and abroad.

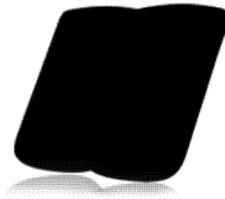
Connect your notebook to a high-speed wireless network around the globe

Browse the Internet, download files, send and receive emails while in the U.S. and in over 205 countries, more than 125 with 3G speeds.

Occasional Global Traveler

Take advantage of the Global Travel Program for your trips lasting 21 days or less.

Double Your BlackBerry®



Buy the BlackBerry Bold™ 9650 and Get One FREE*!

[Learn More](#)

* Free phone 2-year price must be of equal or lesser value. New 2-year activation per phone on voice plan with data pack \$29.99 or higher required.



Calling From France

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Go Anywhere. Call Anyone.

Traveling around the country or around the world, Global Phone puts the power to stay connected in your hand.

Supported Network Technology

See the Verizon Wireless products that utilize the network technology supported in this destination for voice calls.

Select a technology to view compatible devices.

- [Dual Band GSM](#)
- [3G \(High Speed Data\)](#)

Rates

GSM Standard Roaming Per Minute Rate: \$1.29
 GSM Value Plan Roaming Per Minute Rate: \$0.99

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Coverage Maps

Check the coverage maps below to determine which service will work best for your travels.

- [3G \(High Speed Data\)](#)

Calling France From the U.S.?

[Find Coverage](#)

FAQs

- [What is Global Phone Service?](#)
- [What is a Global Phone?](#)
- [Are there any equipment or service requirements for Global Phone?](#)
- [What are the rates for calls made and received while traveling internationally?](#)
- [What is the dialing pattern while traveling internationally?](#)

[More](#)



Map Legend

 CDMA Voice	 GSM Voice	 3G
 CDMA Voice + Data	 GSM Voice + Data	

This map reflects a depiction of approximate wireless coverage and does not guarantee service. Many factors, including customer's equipment, terrain, proximity to buildings, foliage and weather, may impact service. Coverage depicted is based on 3rd party network information and Verizon Wireless cannot ensure its accuracy. Above maps are not to be reproduced without written consent from Verizon Wireless.

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Dialing Instructions

To US or Other North American Numbering Plan (NANP) Destination

Roaming Country Exit Code + Destination Country Code + Area Code + Phone Number

Example: "+" + 1 + 212 + 123-4567

Note: To check voice mail, dial your mobile number with the area code using the pattern above.

To a Non-North American Numbering Plan (NANP) Destination

Roaming Country Code Exit Code + Destination Country Code + Area Code + Phone Number

Example: "+" + 44 + 1234 + 567890 (e.g. calling UK)

Depending on your device, press and hold "0" or "*" to display the "+" symbol. The "+" symbol automatically inserts the exit code for the country from which you are calling.

Find International Calling Details

Country:

Go

Other Available Services

If Global Phone doesn't meet your needs, you can try one of these additional Verizon Wireless services.

[International Roaming](#) - Use your existing phone for international use

[GlobalEmail](#) - Access your email where you travel

[GlobalAccess](#) - Stay connected online abroad

[Global Travel Program](#) - For those who take infrequent trips overseas



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Terms and Conditions

International Eligibility

International Eligibility requires a minimum payment history and credit approval; a contract term and security deposit may also be required. Failure to maintain these requirements may result in suspension of International Eligibility without notice. You can remove International Eligibility at any time by calling Customer Service. You are responsible for any unauthorized use of your SIM Card and will safeguard security codes. Upon termination of service, destroy your SIM Card. See verizonwireless.com/global for details.

International Long Distance

You need International Eligibility to make international calls to most countries, but you can make calls to some North American destinations without it. Additional surcharges may apply when calling certain countries; see verizonwireless.com/global for details.

International Roaming

Some services, such as premium text messaging, directory assistance, entertainment lines and third-party services, may be available, and charges for these services will be billed (along with applicable toll charges) in addition to roaming rates. Message-waiting-indicator service is not available where Text Messaging is not available. When using GlobalAccess, Global Phone, or GlobalEmail services, or if you subscribe to a Nationwide Plus Canada or Nationwide Plus Mexico Plan, and you're roaming near country borders, calls may be carried by a cell site located in a neighboring country and billed at that country's rates. Verizon Wireless will terminate your service for good cause if less than half of your voice or data usage over three consecutive billing cycles is on the Verizon Wireless National Enhanced Services Rate and Coverage Area.



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If the country you are looking for is not appearing, we may offer service through [Global Rental](#).



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Call and Email Around the Globe.

Verizon Wireless easy-to-use voice and data solution for international business travel.

Supported Network Technology

See the Verizon Wireless products that utilize the network technology supported in this destination for global email.

Select a technology to view compatible devices.

[Dual Band GSM](#) [3G \(High Speed Data\)](#)

Rates

\$64.99 Unlimited Feature w/Voice Calling Plan
Pay Per Use Plan: \$0.02/KB

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Coverage Maps

Check the coverage maps below to determine which service will work best for your travels.

- [3G \(High Speed Data\)](#)

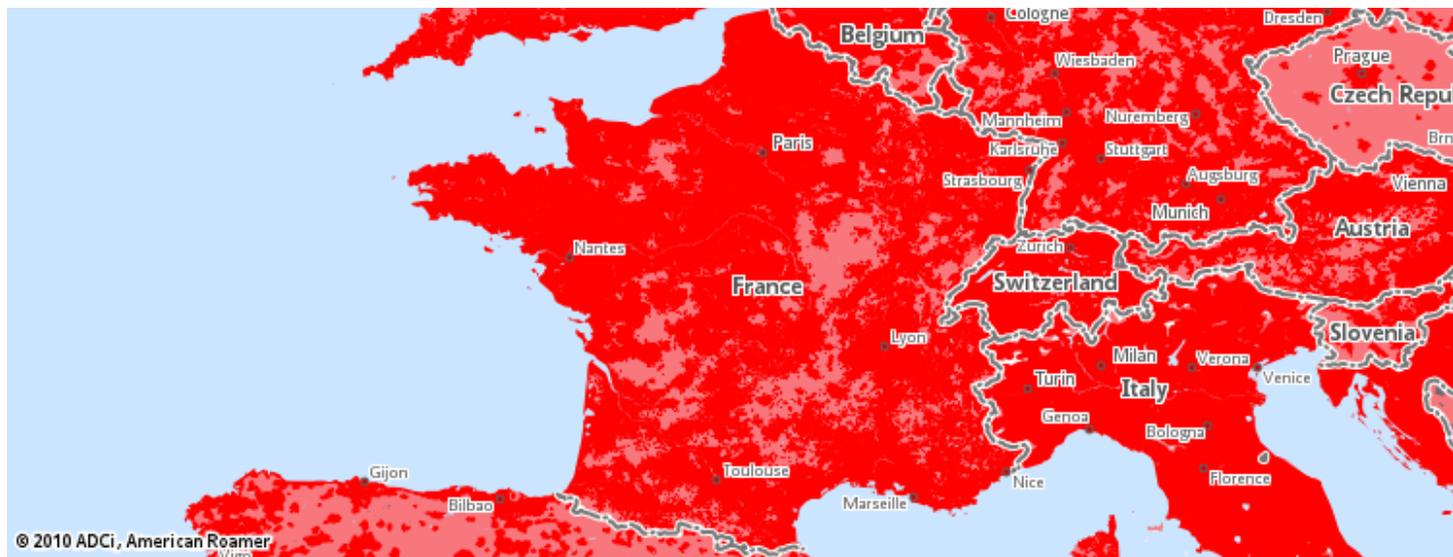
Calling France From the U.S.?

[Find Coverage](#)

FAQs

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- [What do I need to do to make sure I have everything set up for GlobalEmail and Global Phone services before I travel abroad?](#)
- [How do I place a call while traveling internationally?](#)
- [How do I switch to GSM or UMTS mode while traveling abroad?](#)

[More](#)



Map Legend

 CDMA Voice	 GSM Voice	 3G
 CDMA Voice + Data	 GSM Voice + Data	

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Find International Calling Details

Country:

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Other Available Services

If GlobalEmail doesn't meet your needs, you can try one of these additional Verizon Wireless services:

- [International Roaming](#) – Use your Verizon Phone when you travel
- [Global Phone](#) – Use your existing phone for international use
- [GlobalAccess](#) – Stay connected online abroad
- [Global Travel Program](#) – For those who take infrequent trips overseas

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Terms and Conditions

[Data Plans and Features](#)

If you download an audio or video file, the file may be downloaded in sections or in its entirety; data charges will apply to the portion downloaded, regardless of whether you listen to or watch all of it. You may access and monitor your own data usage during a particular billing period, including during the Return Period under your Worry Free Guarantee, by accessing My Verizon online or by contacting Customer Service.

Data sessions automatically terminate after 24 hours of activity. Data session is inactive when no data is being transferred. Data session may seem inactive while data is actively being transferred to the device, or may seem active when it is actually cached and not transferring data. Please note that certain applications or widgets on Smartphones periodically send and receive data in the background, without any action by the user. This incidental data use will be billed according to your data package. Third-party applications may automatically reinitiate data sessions without your pressing or clicking the or connect button.

Data Plans and Features:

Permitted Uses

You can use our Data Plans and Features for accessing the Internet and for such things as: (i) Internet browsing; (ii) email; (iii) intranet access (including accessing corporate intranets, email and individual productivity applications made available by your company); (iv) uploading, downloading and streaming of audio, video and games; and (v) Voice over Internet Protocol (VoIP). Downloads that buffer, such as streaming music and video, will bill for all of the data that has been downloaded, even though you may not have listened to or watched the entire download.

Mobile Broadband/CDMA Data Roaming (Monthly Plans)

- Data usage within the Canada Rate and Coverage Area will be billed at \$0.002/KB or \$2.05/MB.
- Data usage within the Mexico Rate and Coverage Area will be billed at \$0.005/KB or \$5.12/MB
- Data usage in other available countries will be billed at a rate of \$0.02/KB or \$20.48/MB.

You must add International Eligibility to your account to roam in many destinations. Visit verizonwireless.com/narooming

- 3G not available everywhere while roaming.

Data Plans and Features:

Prohibited Uses

You may not use our Data Plans and Features for illegal purposes or purposes that infringe upon others' intellectual property rights, or in a manner that interferes with other users' service; that violates trade and economic sanctions and prohibitions as promulgated by the departments of Commerce, Treasury or any other U.S. government agency; that interferes with the network's ability to fairly allocate capacity among users or that otherwise degrades service quality for other users. Examples of prohibited usage include: (i) server devices or host computer applications that are broadcast to multiple servers or recipients such that they could enable "bots" or similar routines (as set forth in more detail in (ii) below) or otherwise degrade network capacity or functionality; (ii) "auto-responders," "cancel-bots," or similar automated or manual routines that generate amounts of net traffic that could disrupt net user groups or email use by others; (iii) generating "spam" or unsolicited commercial or bulk email (or activities that facilitate the dissemination of such email); (iv) any activity that adversely affects the ability of other users or systems to use either Verizon Wireless' services or the Internet-based resources of others, including the generation or dissemination of viruses, malware or "denial of service" attacks; (v) accessing, or attempting to access without authority, the information, accounts or devices of others, or to penetrate, or attempt to penetrate, Verizon Wireless' or another entity's network or systems; or (vi) running software or other devices that maintain continuous active Internet connections when a computer's connection would otherwise be idle, or "keep alive" functions, unless they adhere to Verizon Wireless' requirements for such usage, which may be changed from time to time. Customers who do not have dedicated Mobile Broadband devices cannot tether other devices to laptops or personal computers for use as wireless modems unless they subscribe to Mobile Broadband Connect.

We further reserve the right to take measures to protect our network and other users from harm, compromised capacity or degradation in performance. These measures may impact your service, and we reserve the right to deny, modify or terminate service, with or without notice, to anyone we believe is using Data Plans or Features in a manner that adversely impacts our network. We may monitor your compliance, or other subscribers' compliance, with these terms and conditions, but we will not monitor the content of your communications except as otherwise expressly permitted or required by law. [See verizonwireless.com/privacy]

Mobile Email (including GlobalEmail), Email and Web for BlackBerry/ Smartphones

Mobile Email and Email and Web for BlackBerry/Smartphones subscribers cannot: (i) access the Internet, intranets or other data networks except as the device's native applications and capabilities permit, unless they subscribe to Mobile Broadband Connect; or (ii) use any application that tethers their device to laptops or personal computers other than for use of the Wireless Sync, Good or BlackBerry solutions (if applicable) unless they subscribe to Mobile Broadband Connect.

International Eligibility

International Eligibility requires a minimum payment history and credit approval; a contract term and security deposit may also be required. Failure to maintain these requirements may result in suspension of International Eligibility without notice. You can remove International Eligibility at any time by calling Customer Service. You are responsible for any unauthorized use of your SIM Card and will safeguard security codes. Upon termination of service, destroy your SIM Card. See verizonwireless.com/global for details.

International Long Distance

You need International Eligibility to make international calls to most countries, but you can make calls to some North American destinations without it. Additional surcharges may apply when calling certain countries; see verizonwireless.com/global for details.

International Roaming

Some services, such as premium text messaging, directory assistance, entertainment lines and third-party services, may be available, and charges for these services will be billed (along with applicable toll charges) in addition to roaming rates. Message-waiting-indicator service is not available where Text Messaging is not available. When using GlobalAccess, Global Phone, or GlobalEmail services, or if you subscribe to a Nationwide Plus Canada or Nationwide Plus Mexico Plan, and you're roaming near country borders, calls may be carried by a cell site located in a neighboring country and billed at that country's rates. Verizon Wireless will terminate your service for good cause if less than half of your voice or data usage over three consecutive billing cycles is on the Verizon Wireless National Enhanced Services Rate and Coverage Area.

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 - Quad Band GSM

Your Access to the World Just Got Easier

With GlobalAccess, you can browse the internet and access email quickly and easily while traveling abroad.



Supported Network Technology

See the Verizon Wireless products that utilize the network technology supported in this destination for internet access.

Select a technology to view compatible devices.

[Dual Band GSM](#) [3G \(High Speed Data\)](#)

Rates

\$69.99 Monthly Access: 100MB (\$0.005 /KB after allowance)
\$159.99 Monthly Access: 200MB (\$0.005 /KB after allowance)
Pay Per Use Plan: \$0.02/KB

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- [Are there any equipment or service requirements to use GlobalAccess internationally?](#)
- [What countries can I travel to and have data access with GlobalAccess?](#)
- [Should a customer with a Global Phone device use the SIM card from the phone in the GlobalAccess device?](#)

[More](#)



Map Legend

 CDMA Voice	 GSM Voice	 3G
 CDMA Voice + Data	 GSM Voice + Data	

This map reflects a depiction of approximate wireless coverage and does not guarantee service. Many factors, including customer's equipment, terrain, proximity to buildings, foliage and weather, may impact service. Coverage depicted is based on 3rd party network information and Verizon Wireless cannot ensure its accuracy. Above maps are not to be reproduced without written consent from Verizon Wireless.

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Find International Calling Details

Country:

[Go](#)

Other Available Services

If GlobalAccess doesn't meet your needs you can try one of these additional Verizon Wireless services:

[International Roaming](#) - Use your existing phone for international use

[Global Phone](#) - A phone that allows calling in even more countries

[GlobalEmail](#) - Access your email where you travel

[Global Travel Program](#) - For those who take infrequent trips overseas

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Terms and Conditions

[Data Plans and Features](#)

If you download an audio or video file, the file may be downloaded in sections or in its entirety; data charges will apply to the portion downloaded, regardless of whether you listen to or watch all of it. You may access and monitor your own data usage during a particular billing period, including during the Return Period under your Worry Free Guarantee, by accessing My Verizon online or by contacting Customer Service.

Data sessions automatically terminate after 24 hours of activity. Data session is inactive when no data is being transferred. Data session may seem inactive while data is actively being transferred to the device, or may seem active when it is actually cached and not transferring data. Please note that certain applications or widgets on Smartphones periodically send and receive data in the background, without any action by the user. This incidental data use will be billed according to your data package. Third-party applications may automatically reinitiate data sessions without your pressing or clicking the or connect button.

Data Plans and Features:

Permitted Uses

You can use our Data Plans and Features for accessing the Internet and for such things as: (i) Internet browsing; (ii) email; (iii) intranet access (including accessing corporate intranets, email and individual productivity applications made available by your company); (iv) uploading, downloading and streaming of audio, video and games; and (v) Voice over Internet Protocol (VoIP). Downloads that buffer, such as streaming music and video, will bill for all of the data that has been downloaded, even though you may not have listened to or watched the entire download.

Mobile Broadband/CDMA Data Roaming (Monthly Plans)

- Data usage within the Canada Rate and Coverage Area will be billed at \$0.002/KB or \$2.05/MB.
- Data usage within the Mexico Rate and Coverage Area will be billed at \$0.005/KB or \$5.12/MB
- Data usage in other available countries will be billed at a rate of \$0.02/KB or \$20.48/MB.

You must add International Eligibility to your account to roam in many destinations. Visit verizonwireless.com/naroaming

- 3G not available everywhere while roaming.

Data Plans and Features:

Prohibited Uses

You may not use our Data Plans and Features for illegal purposes or purposes that infringe upon others' intellectual property rights, or in a manner that interferes with other users' service; that violates trade and economic sanctions and prohibitions as promulgated by the departments of Commerce, Treasury or any other U.S. government agency; that interferes with the network's ability to fairly allocate capacity among users or that otherwise degrades service quality for other users. Examples of prohibited usage include: (i) server devices or host computer applications that are broadcast to multiple servers or recipients such that they could enable "bots" or similar routines (as set forth in more detail in (ii) below) or otherwise degrade network capacity or functionality; (ii) "auto-responders," "cancel-bots," or similar automated or manual routines that generate amounts of net traffic that could disrupt net user groups or email use by others; (iii) generating "spam" or unsolicited commercial or bulk email (or activities that facilitate the dissemination of such email); (iv) any activity that adversely affects the ability of other users or systems to use either Verizon Wireless' services or the Internet-based resources of others, including the generation or dissemination of viruses, malware or "denial of service" attacks; (v) accessing, or attempting to access without authority, the information, accounts or devices of others, or to penetrate, or attempt to penetrate, Verizon Wireless' or another entity's network or systems; or (vi) running software or other devices that maintain continuous active Internet connections when a computer's connection would otherwise be idle, or "keep alive" functions, unless they adhere to Verizon Wireless' requirements for such usage, which may be changed from time to time. Customers who do not have dedicated Mobile Broadband devices cannot tether other devices to laptops or personal computers for use as wireless modems unless they subscribe to Mobile Broadband Connect.

We further reserve the right to take measures to protect our network and other users from harm, compromised capacity or degradation in performance. These measures may impact your service, and we reserve the right to deny, modify or terminate service, with or without notice, to anyone we believe is using Data Plans or Features in a manner that adversely impacts our network. We may monitor your compliance, or other subscribers' compliance, with these terms and conditions, but we will not monitor the content of your communications except as otherwise expressly permitted or required by law. [See verizonwireless.com/privacy]

International Eligibility

International Eligibility requires a minimum payment history and credit approval; a contract term and security deposit may also be required. Failure to maintain these requirements may result in suspension of International Eligibility without notice. You can remove International Eligibility at any time by calling Customer Service. You are responsible for any unauthorized use of your SIM Card and will safeguard security codes. Upon termination of service, destroy your SIM Card. See verizonwireless.com/global for details.

International Roaming

When using GlobalAccess, Global Phone, or GlobalEmail services, or if you subscribe to a Nationwide Plus Canada or Nationwide Plus Mexico Plan, and you're roaming near country borders, calls may be carried by a cell site located in a neighboring country and billed at that country's rates. Verizon Wireless will terminate your service for good cause if less than half of your voice or data usage over three consecutive billing cycles is on the Verizon Wireless National Enhanced Services Rate and Coverage Area.

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If the country you are looking for is not appearing, we may offer service through [Global Rental](#).



Calling From France

International Services

- [Overview](#)
- [What's New](#)
- From the U.S.
 - [International Long Distance](#)
 - [International Text Messaging](#)
 - [International Picture & Video Messaging](#)
- Outside the U.S.
 - [International Roaming](#)
 - [Cruise Ship Coverage](#)
 - [Global Phone](#)
 - [GlobalEmail](#)
 - [GlobalAccess](#)
 - **[GlobalAccess Connect](#)**
 - [Occasional Global Traveler](#)
 - [Global Satellite](#)
- Countries by Technology
 - [CDMA](#)
 - [Dual Band GSM](#)
 - [Quad Band GSM](#)

Stay Connected Around the World

Get reliable, wireless Internet access while traveling abroad with GlobalAccess Connect from Verizon Wireless.



Supported Network Technology

See the Verizon Wireless products that utilize the network technology supported in this destination for internet access.

Select a technology to view compatible devices.

[Dual Band GSM](#) [3G \(High Speed Data\)](#)

Rates

\$65 Monthly Access Plan: 100MB (\$0.005 /KB after allowance)
\$155 Monthly Access Plan: 200MB (\$0.005 /KB after allowance)

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Coverage Maps

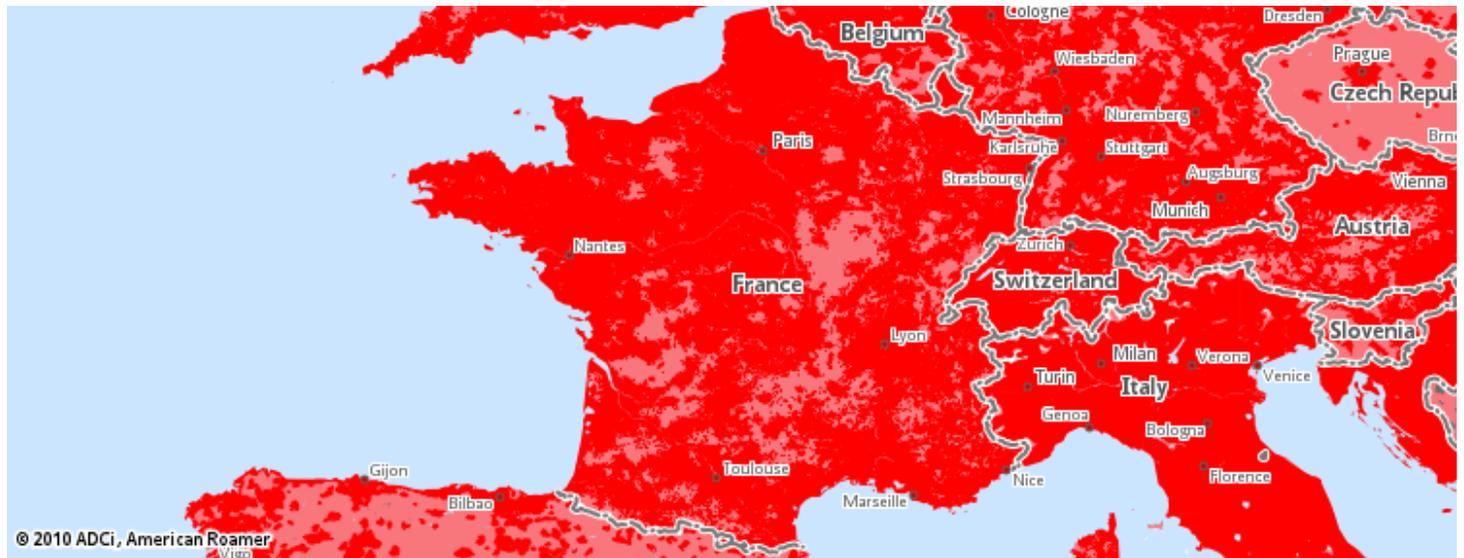
Check the coverage maps below to determine which service will work best for your travels.

- [3G \(High Speed Data\)](#)

Calling France From the U.S.?

[Find Coverage](#)

FAQs



Map Legend

 CDMA Voice	 GSM Voice	 3G
 CDMA Voice + Data	 GSM Voice + Data	

This map reflects a depiction of approximate wireless coverage and does not guarantee service. Many factors, including customer's equipment, terrain, proximity to buildings, foliage and weather, may impact service. Coverage depicted is based on 3rd party network information and Verizon Wireless cannot ensure its accuracy. Above maps are not to be reproduced without written consent from Verizon Wireless.

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Find International Calling Details

Country:

[Go](#)

Other Available Services

If you do not need the capabilities of GlobalAccess Connect, you can try one of these additional Verizon Wireless services:

- [International Roaming](#) - Use your existing phone for international use
- [Global Access](#) - Stay connected online abroad
- [Global Phone](#) - A phone that allows calling in even more countries
- [GlobalEmail](#) - Access your email where you travel
- [Global Travel Program](#) - For those who take infrequent trips overseas

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Terms and Conditions

* 5GB (5,120MB) allowance is shared between the United States, Canada, Puerto Rico and the U.S. Virgin Islands.

100MB or 200MB allowance is shared between select destinations identified.

Usage in excess of your 5GB and 100MB or 200MB allowances, and all other international usage outside of your allowance, will be billed according to your plan.

See below for details on the required equipment and taxes, surcharges, and fees related to GlobalAccess.

Additional Plan Information:

Required Equipment:

GlobalAccess capable device or NationalAccess or Mobile Broadband-capable device and Global ExpressCard.

Required Minimum Term, Activation Fees, and Early Termination Fee

- Month-to-month, one-year or two-year contract term required per
- Activation Fee: \$35 per line
- Activation fees may vary or be waived for business customers that have a Major Account Agreement with Verizon Wireless.
- Early Termination Fee: Up to \$175, or up to \$350 if you purchased an advanced device, per line for one- or two-year contract terms.

Taxes, Surcharges, and Fees

- Tolls, taxes, surcharges, and fees, such as E911 and gross receipt charges, vary by market and as of February 1, 2010, add between 5% and 37% to your standard monthly access and other charges.
- Monthly Federal Universal Service Charge (varies quarterly based on FCC rate) is 14.1% of interstate and international telecom charges as of January 1, 2010.
- Monthly Regulatory Charge (subject to change) is up to 2¢ per line.
- Monthly Administrative Charge (subject to change) is 6¢ per line.
- The Federal Universal Service, Regulatory, and Administrative Charges are Verizon Wireless charges, not taxes. For more details on these charges, call (888) 684-1888.

Important Customer Information

For more information, refer to the Customer Agreement or speak with a Sales Representative. Service is subject to the Customer Agreement, which you should read before activating service. Plans not available in all areas. Credit approval required. Billing, shipping and end-user address must be within the Verizon Wireless licensed and service areas where the wireless phone number is issued.

To make sure you have coverage in newly expanding markets, from the VZAccessSM Manager, go into "Options" and click "Activation," while in the National Enhanced Services Rate and Coverage Area every three months. This may alter your Coverage Area. Billing charges may sometimes be delayed. You are responsible for maintaining virus protection when accessing service. Install VZAccess Manager and run OTA Wizard before you leave the U.S. VZAccess Manager is provided with a GlobalAccess device. Previous versions of VZAccess Manager may not support GlobalAccess. A GlobalAccess ExpressCard cannot be provisioned without a Mobile Broadband device. Both the GlobalAccess ExpressCard and Mobile Broadband cannot be in use at the same time.

Mobile Broadband:

Subject to VZAccessSM Acceptable Use Policy, available at <http://www.verizonwireless.com/b2c/footer/acceptableuse.jsp>.

Data Plans and Features: Permitted Uses. You can use our Data Plans and Features for accessing the Internet and for such uses as: (i) Internet browsing; (ii) e-mail; (iii) intranet access (including accessing corporate intranets, e-mail and individual productivity applications made available by your company); (iv) uploading, downloading and streaming of audio, video and games; and (v) Voice over Internet Protocol (VoIP).

You may not use our Data Plans and Features for illegal purposes or purposes that infringe upon others' intellectual property rights, or in a manner that interferes with other users' service;

that violates trade and economic sanctions and prohibitions as promulgated by the departments of Commerce, Treasury or any other U.S. government agency; that interferes with the network's ability to fairly allocate capacity among users or that otherwise degrades service quality for other users. Examples of prohibited usage include: (i) server devices or host computer applications that are broadcast to multiple servers or recipients such that they could enable "bots" or similar routines (as set forth in more detail in (ii) below) or otherwise denigrate network capacity or functionality; (ii) "auto-responders," "cancel-bots," or similar automated or manual routines that generate amounts of net traffic that could disrupt net user groups or email use by others; (iii) generating "spam" or unsolicited commercial or bulk email (or activities that facilitate the dissemination of such email); (iv) any activity that adversely affects the ability of other users or systems to use either Verizon Wireless' services or the Internet-based resources of others, including the generation or dissemination of viruses, malware or "denial of service" attacks; (v) accessing, or attempting to access without authority, the information, accounts or devices of others, or to penetrate, or attempt to penetrate, Verizon Wireless' or another entity's network or systems; or (vi) running software or other devices that maintain continuous active Internet connections when a computer's connection would otherwise be idle, or "keep alive" functions, unless they adhere to Verizon Wireless' requirements for such usage, which may be changed from time to time.

Customers who do not have dedicated Mobile Broadband devices cannot tether other devices to laptops or personal computers for use as wireless modems unless they subscribe to Mobile Broadband Connect.

You may access and monitor your own data usage during a particular billing period, including during the Return Period under your Worry Free Guarantee, by accessing My Verizon online or by contacting Customer Service.

We further reserve the right to take measures to protect our network and other users from harm, compromised capacity or degradation in performance. These measures may impact your service, and we reserve the right to deny, modify or terminate service, with or without notice, to anyone we believe is using Data Plans or Features in a manner that adversely impacts our network. We may monitor your compliance, or other subscribers' compliance, with these terms and conditions, but we will not monitor the content of your communications except as otherwise expressly permitted or required by law. [See verizonwireless.com/privacy]

The Data Plans or Features are for individual use only and you may not offer them for resale.

Approximate Data Usage Examples: Basic information and examples showing the approximate data usage for several common Internet activities appear below.

The speed of the Verizon Wireless data network is measured in Kilobits (kb) per second. However, the amount of data transmitted over the Verizon Wireless data network is measured in Kilobytes (KB), Megabytes (MB) or Gigabytes (GB).

Bit	A unit of information that represents a single character.
Byte	A unit of information composed of 8 bits.
Kilobyte	1024 bytes (measuring the number of kilobytes tells you the size of a file and/or the amount of data you have used).
Megabyte	1024 Kilobytes (measuring the number of megabytes tells you the size of a file and/or the amount of data you have used).
Gigabyte	1024 Megabytes (measuring the number of gigabytes tells you the amount of data you have used).

Examples	
Application	Approximate Size
E-mail (1 text page without attachments) (Based on this assumption, you would need to send and/or receive approximately 1,747,627 e-mails in a month to reach 5 GB)	3 KB

Word Document (5 text pages) (Based on this assumption, you would need to download approximately 74,897 Word Documents in a month to reach 5 GB)	70 KB
Typical Web Page lookup (Based on this assumption, you would need to look up approximately 17,476 web pages in a month (or over five hundred per day) to reach 5 GB)	400 KB
Low Resolution Digital Photo (Based on this assumption, you would need to download approximately 10,485 low resolution digital photos in a month to reach 5 GB)	500 KB
PowerPoint Presentation (20 pages text & light graphics) (Based on this assumption, you would need to download approximately 1,707 PowerPoint presentations in a month to reach 5 GB)	3 MB
V CAST Music Over-the-Air Download (3-minute song) (Based on this assumption, you would need to download approximately 2,560 songs in a month to reach 5 GB)	2 MB
V CAST Music PC Download (3-minute song) (Based on this assumption, you would need to download approximately 1,280 songs in a month (or over 40 per day) to reach 5 GB)	4 MB
Note: The above examples are just estimates, based on approximate size assumptions. Actual file sizes and user experiences will vary.	

Verizon Wireless Plans, Rate and Coverage Areas, rates, agreement provisions, business practices, procedures and policies are subject to change as specified in the Customer Agreement. Verizon Wireless will terminate your service if less than half of your usage over three consecutive billing cycles is on the Verizon Wireless National Enhanced Services Rate and Coverage Area. Your SIM card is for use only with your GlobalAccess device, only for the purpose of this service. You are responsible for any unauthorized use of your SIM card and will safeguard security codes. Upon termination of your service, please destroy your SIM card. By using your GlobalAccess device outside the United States, you agree that you are solely responsible for complying with all applicable foreign laws, rules and regulations ("foreign laws"). You further agree that Verizon Wireless is not liable for any damages that result from your failure to comply with foreign laws.

Last Update 07/29/2010

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If the country you are looking for is not appearing, we may offer service through [Global Rental](#).

EXHIBIT 3

YOUR GUIDE

PHONES/PLANS/PRICING
Fall/Winter 2010/2011 | FREE



HP® Pavilion dm1-2010nr
Entertainment PC

THE POWER IS YOURS WITH MY VERIZON

Total control starts at
verizonwireless.com/myverizon

- Pay your bill
- Back up your contacts
- Check your usage
- Change your plan and features
- Activate a phone
- Learn about your phone
- Sign up for paperless billing



On the go?
Go mobile.
My Verizon Mobile.

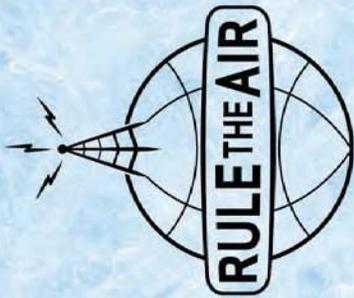


CON80172EN

CONSUMER110EN

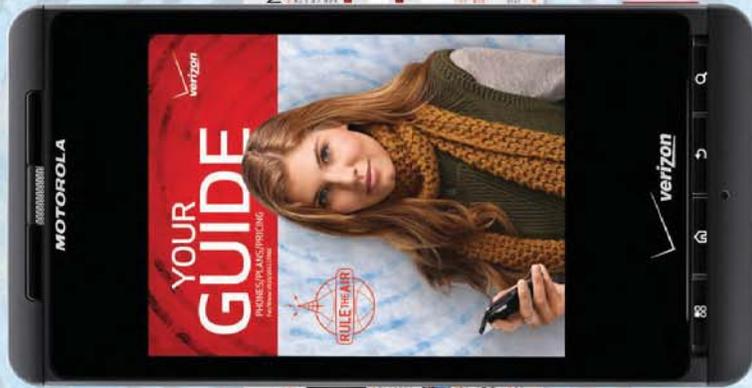
CONSIDER YOURSELF A KNOW-IT-ALL. AND BE PROUD OF IT.

Put the latest Verizon Wireless product and plan information right on your phone with the new *Your Guide Mobile*, and access it when you want, where you want.



Be the first to get updates from Verizon Wireless, including:

- The hottest devices, like the DROID X
- The coolest apps and services, like Skype mobile™ and VZ Navigator®
- Helpful plan information, including voice, data and messaging pricing
- Coverage maps and important information

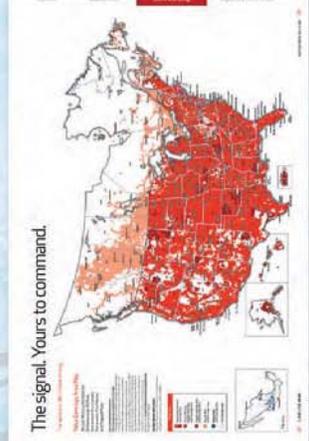


Nationwide Plans

Plan	Monthly Price	Monthly Allowance	Additional Service
Nationwide Plus	\$35	100 min. talk, 100 text, 100 MB data	Free international service
Nationwide Plus Canada & Mexico	\$45	100 min. talk, 100 text, 100 MB data	Free international service
Nationwide Plus 65 Plus	\$45	100 min. talk, 100 text, 100 MB data	Free international service
Nationwide Plus 65 Plus Plus	\$55	100 min. talk, 100 text, 100 MB data	Free international service

Data Packages

Package	Monthly Price	Monthly Allowance	Additional Service
Basic	\$15	100 MB data	Free international service
Standard	\$25	200 MB data	Free international service
Plus	\$35	300 MB data	Free international service
Plus Plus	\$45	400 MB data	Free international service



To get *Your Guide Mobile* on your device, text "GUIDE" to 1000.



Your Guide Mobile
Download ScanLife to get quick access to *Your Guide Mobile*. See page 14 for ScanLife info.

Standard text and data charges apply.



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Global Services

Your plan for world domination starts here. Send a signal heard 'round the world.

International From the U.S.:

Use your own phone to call anywhere in the world.

International Long-Distance Value Plan

For \$3.99 monthly access, you'll get rates as low as 6¢ per minute, plus airtime, for calls from your Home Rate and Coverage Area.

International Messaging

Text family and friends in more than 140 countries.¹ Or send picture and video messages to people in more than 70 countries.

Visit verizonwireless.com/internationalmessaging

For a complete list of destinations, rates and coverage, visit verizonwireless.com/global before traveling.

Global Outside the U.S.:

One device. One number. One bill. Enjoy convenient, reliable voice service in more than 220 countries.² Use any Verizon Wireless phone in more than 40 popular countries worldwide, including Canada, Mexico and select Caribbean countries.

Global Value Plan

Get discounted rates in more than 150 countries. Just \$4.99 per line per month.

Global Messaging

No time to call? No worries. Use your phone to send picture, video and text messages while traveling the world.

Occasional Global Traveler

Use our Global Travel Program for occasional travel abroad in most overseas locations. Wireless voice- and data-capable devices are available.

International Phone and Messaging Options (from the U.S.)

Voice Service	Voice rates as low as 49¢ per minute
Text Messaging	25¢ per recipient per text message sent and 20¢ per text message received
Picture and Video Messaging	50¢ per recipient per picture or video message sent and 25¢ per picture or video message received

Global Phone and Global Messaging Options (outside the U.S.)

Voice Service	Voice rates as low as 69¢ per minute
Text Messaging	Canada 20¢ per recipient per message sent and 20¢ per message received or according to your Domestic Messaging Plan; other countries 50¢ per recipient per message sent and 5¢ per message received
Picture and Video Messaging	Picture and video messaging rates are the same as when you're in the U.S., plus global data roaming charges ³

¹In certain countries, you can use global services immediately at the rates applicable to those countries. In other countries you may need a SIM card and have international eligibility. See page 42 for more information.

²Text, picture and video messages sent to phone numbers in Canada, Mexico, Puerto Rico and the U.S. Virgin Islands are charged the same as messages to numbers in the U.S.

³Service may be restricted without notice.

⁴In addition to the per-message rates, global data roaming rates also apply: Canada - 0.0027/KB or 2¢/MB; Mexico - 0.0052/KB or 5¢/MB; all other countries - 0.027/KB or 20¢/MB. See the Small Business Guide for more details on global data roaming charges.

Customer Agreement & Important Information

devices

apps & more

plans & pricing

important information

Activity Type	Approximate Size
By occurrences per month/day	
Email (1 text page without attachments)	10 KB
Word Document (5 text pages)	70 KB
Typical Web Page Lookup	400 KB ¹
Digital Photo (low resolution)	500 KB
PowerPoint® Presentation (20 pages light graphics)	3 MB
Digital Photo (high resolution 10MP jpeg)	5 MB
Song (3 1/2 minute MPEG-4 audio 256Kbps)	7.5 MB
Software Updates (Windows Operating System)	200-500 MB
By hours/minutes per month/day	
Online Games	5 MB/hour
Voice Call (VoIP)	20 MB/hour
Audio Streaming (online radio and music)	60 MB/hour
Voice Call with Video (VoIP)	74 MB/hour
Video Streaming (TV shows, movies, social media - std. def)	260 MB/hour

¹Can exceed 2 MB with graphically intense pages or with video.

How can I check data usage for my Mobile Broadband device?

You can check your approximate unbilled monthly data usage for your Mobile Broadband device through the following options:²

- VZAccess® Manager "Usage" button³
- My Verizon or My Business Account
- Have your Mobile Broadband device wireless number available and call **1.800.922.0204**
- Prepaid Mobile Broadband customers can check usage through the VZAccess Manager "Usage" button³ or by calling **1.800.786.8419**

Once Prepaid Mobile Broadband allowance or expiration is reached, any session that is in progress will end and any content that is being sent or received may be lost. For expirations, day = 24 hours, week = 7 days, month = 30 days.

Mobile Broadband/CDMA Data Roaming (Monthly Plans)

• Data usage within the Canada Rate and Coverage Area will be billed at \$0.002/KB or \$2⁹⁹/MB.

• Data usage within the Mexico Rate and Coverage Area will be billed at \$0.005/KB or \$5¹⁷/MB.

• Data usage in other available countries will be billed at a rate of 0.02/KB or \$20⁹⁹/MB. You must add international Eligibility to your account to roam in many destinations. Visit verizonwireless.com/narooming

• EV-DO not available everywhere while roaming.

²There will be a time lag between the end of data session and the point at which the usage will appear on any of these tools. Customers must download the most recent version of VZAccess Manager from vzw.com for this capability. For Windows, version 6.7 or higher. For Mac OS X, version 4.0 or higher. When using a Mobile Hotspot, you must connect with the included USB cable to check your usage. VZAccess Manager.

Additional Plan Information for Nationwide Plans and Mobile Broadband

Minimum Contract Term
Each line requires a month-to-month, one- or two-year contract.

Activation Fees

For most lines, there is a \$35 activation fee. If you have a secondary Family SharePlan or secondary Nationwide 65 Plus line with a two-year contract term, then the activation fee is \$25.

Early Termination Fees

The early termination fee is up to \$175, or up to \$350 if your contract term results from your purchase of an Advanced Device. For a complete list of Advanced Devices, go to verizonwireless.com/advanceddevices

If you're activating Mobile Broadband Plans or you're on a month-to-month term, you are not eligible for monthly access fee discounts.

Taxes, Surcharges and Fees

The market you're in determines taxes, surcharges and fees, such as E911 and gross receipt charges. As of October 1, 2010, they can add between 5% and 39% to your standard monthly access and other charges.

Monthly Federal Universal Service (12.9% of interstate and international telecom charges, as of October 1, 2010; varies quarterly based on FCC rate), Regulatory (13¢ per line for Nationwide Plans);² per line for Mobile Broadband Plans) and Administrative (83¢ per line for Nationwide Plans);⁶ per line for Mobile Broadband Plans) Charges are Verizon Wireless charges, not taxes, and are subject to change. For more details on these Verizon Wireless charges, call **1.888.654.1888**.

Downloads that buffer, such as streaming music and video, will bill for all of the data that has been downloaded, even though you may not have listened to or watched the entire download.

EXHIBIT 4

**THE FCC SURVEY:
WHAT THE DATA CAN TELL US ABOUT “BILL SHOCK” AND
EARLY TERMINATION FEES**

Joel B. Cohen, Ph.D
Distinguished Service Professor Emeritus
University of Florida

July 2010

Introduction and Summary

On May 26, 2010, the Federal Communications Commission issued a news release saying, among other things, that the findings of a large survey “indicated that 30 million Americans—or one in six mobile users—have experienced ‘bill shock,’ a sudden increase in their monthly bill that is not caused by a change in service plan.” The FCC survey was also said to show, “that nearly half of cell phone users who have plans with early termination fees...don’t know the amount of the fees they’re accountable for. “ A summary of survey findings issued by FCC staff provides significantly more detail about results, but it essentially repeats these conclusions: “The Federal Communications Commission new survey of American consumers of broadband and cell phone service finds that one in six cell phone users has experienced ‘bill shock’ . . . This translates into approximately 30 million Americans who have at one time had ‘bill shock’ on their monthly bill.” The FCC repeats the claim of “bill shock” a number of times in this news release, leading the reader to believe the phrase is well supported by the survey data, the quality of which is heightened by citing the margin of error at only plus or minus two percentage points. Regarding early termination fees (ETFs), “For those with personal cell phones, 54% said they would have to pay an ETF and 18% did not know whether they would have to pay a fee....Among personal cell phone users who said they were subject to an ETF, 47% did not know what the amount of the fee would be.”

I am a Distinguished Service Professor Emeritus at the University of Florida. I received my B.S. in Business Administration, MBA with a focus in Marketing, and Ph.D. in Business Administration/Marketing with the supporting Field of Social Psychology from U.C.L.A. I have published many highly cited articles and book chapters on psychological processes that are important in attitude formation and consumer decision making along with a variety of other consumer behavior topics in a number of leading journals including the Journal of Consumer Research, Journal of Marketing Research, and Journal of Consumer Psychology as well as a number of other edited volumes including authoritative handbooks in my field. In addition, I was recently awarded the Distinguished Service Award for lifetime achievements in scholarly research by the Journal of Consumer Research as well as that journal’s “Best Article Award.” I served as the Editor of the Journal of Public Policy & Marketing and as the President of the Association for Consumer Research, the leading scholarly organization in the field. Prior to joining the University of Florida, I served as Director of Social and Behavioral Science Research at National Analysts. I have been a consumer behavior and survey research consultant to the Federal Trade Commission and other U.S. and Canadian investigatory and regulatory bodies. Among other projects, I was selected by the National Cancer Institute to design and carry out a national survey to help establish consumers’ understanding of cigarette health risks and to present these findings to the President’s Cancer Panel.

Verizon Wireless asked me to review the survey data made available by the FCC to determine whether the data adequately supported the agency's claims and conclusions. In my opinion, they do not. The survey and the conclusions in the agency's summary have numerous defects. In summary:

- Despite the FCC report's claim that the survey demonstrated "bill shock," the survey never in fact asked respondents whether they had experienced "shock" or even "surprise" about their wireless bill. For this reason alone, the FCC report's highly publicized conclusion is invalid.
- The survey only asked respondents about increases in their bill (Q.52), but never asked questions about whether those increases were expected. Customer's bills obviously vary from month to month as a function of consumers' decisions to use available services. Home energy and water bills, for example, vary considerably, but it would be inappropriate to conclude that consumers were "shocked" when they saw that their bills went up during a relatively hot or cold month or when there was no rain to water their lawns. Gasoline and credit card bills can vary significantly as a function of holiday travel and vacations, and consumers anticipate that will happen. If the same FCC survey approach to these and many other categories of expenses was taken and people were only asked whether such bills had increased, similar results would be found. It would be nonsensical, on that basis alone, to interpret any of these increases as "bill shock." The fact that only 1 in 6 respondents reported a sudden increase indicates, to the contrary, that the vast majority of customers are successfully managing their charges as well as choosing effectively among an array of cell phone plans. The FCC report also offers little support for any claim implying customer dissatisfaction.
- There is tremendous inconsistency throughout the report regarding how similar questions are asked. While some questions are open-ended, allowing people to provide their own best recall, other times interviewers read lists providing ranges of responses that respondents may never have considered.
- The survey's methodology for determining eligibility to answer specific questions was tremendously flawed. Typically, survey practices ensure only participants with knowledge of a particular issue (or exposure to information about that issue) answer questions related to that issue. This survey, however, does not consistently use sensible eligibility criteria (such as confirmed familiarity with bills they are asked about). And when any eligibility criteria (beyond the mere use of a cell phone) are used, they are minimal and subjective. This approach draws into question the accuracy of the FCC's conclusions based on the survey.
- It is fundamental survey research procedure to allow people to say that they have no opinion about an area of inquiry rather than lead people to think they should have an opinion or know something they do not know. In the FCC survey researchers did not inform participants that it is fine to say they don't know or have no opinion about any

subject they are asked about. When such answers actually appeared on the questionnaire, researchers were instructed NOT to read those options to respondents. The survey data therefore is likely to be contaminated by guesses.

- In addition to failing to qualify participants to answer detailed questions regarding early termination fees (ETFs), the survey’s ETF questions reflect a number of problems. For example, the survey’s question regarding the importance of ETFs to participants when deciding whether to switch carriers is asked only after a number of other questions are asked about ETFs, thereby communicating the fact that ETFs are important.

Consumers Did Not Report “Bill Shock”.

The FCC left the impression that one in six cell phone users—which they quantify as 30 million Americans—reported “bill shock” on the survey. I can find no question used in this survey that asks people if they ever experienced “bill shock” or even whether they were surprised by any increase in their cell phone bill.

Instead, the 2463 survey respondents who had a cell phone for personal use were asked:

Q. 52 Has your cell phone bill ever increased suddenly, from one month to the next, even if you did not change the calling or texting plan for your phone?

A total of 16 percent answered “yes.”

But “bill shock” implies an unexpected or surprisingly larger bill, and respondents were never asked whether any bill they received was higher than they expected. There are a number of reasons why a bill can be higher from one month to the next, including a greater use of services or a different mix of services used. In fact, the 16 percent figure seems low, considering how much cell phone costs might vary depending on travel or reasons for increased texting or internet use. Another way to interpret the rather low 16 percent response is that most people may have done well anticipating their month to month variations in cell phone use and chosen an appropriate cell phone plan. The FCC survey failed to follow up question 52 by asking people who said “yes” whether the increase was anticipated and whether they knew they were incurring higher charges. There is no appropriate way to discuss these findings in terms of “shock” or “surprise” without asking people those types of questions.

The FCC's analysis of the survey's other questions on "bill shock" similarly suffers from flaws. The FCC press release stated that, "The amount of bill shock varies widely but is often sizeable. In the survey, more than a third of people who experienced bill shock said their bills jumped by at least \$50, and 23 percent said the increase was \$100 or more." These data are taken from those who answered "yes" to question 52, who then were asked:

Q. 53	Do you happen to remember how big the most recent increase was? Was it...(READ)
1	\$1 to \$24
2	\$25 to \$49
3	\$50 to \$74
4	\$75 to \$99, OR
5	\$100 or more?
8	(DO NOT READ) Don't know
9	(DO NOT READ) Refused"

Only 391 respondents were eligible to answer this question. The two largest categories of answers were at the opposite ends of the answers read to respondents: 35.5 percent choosing \$1 to \$24, and 23 percent choosing \$100 or more. This pattern (the highest number of responses in the first and last categories read to respondents) fits the primacy and recency pattern of results that occurs when people's answers are influenced by what they hear first and last in a list, rather than on what they are actually recalling based on their own personal experience. For that reason, many survey researchers prefer to leave such a question open-ended, allowing people to answer it on their own, rather than suggesting particular answers or even an expected range of answers, especially if response categories that are higher than people anticipate are read to them. To do otherwise biases participants toward specific answer categories and may lead people to alter their own answers so as to appear more in step with the range supplied by the experts who designed the survey, since presumably this is what cell phone users have experienced. The researchers' failure to leave this question open-ended is likely to have biased some participants' answers.

There is a surprising amount of inconsistency in how related questions are put to respondents. For reasons that are not made clear, during the first part of this lengthy interview (dealing with internet service), questions similar to Q53 were asked differently, in that the questions were left open-ended, and response categories were not read to respondents:

Q10.	Do you happen to know what the speed of your Internet service at home is according to the company that provides your service? This is sometimes referred to as the download or downstream speed of your connection per second. [DO NOT READ CATEGORIES; PRECODED OPEN-END] [INTERVIEWER: KBPS = kilobits per second; MBPS = Megabits per second]
Q26.	Do you know how much those fees would be? [IF YES, ASK: About how much would the termination fees be?] [DO NOT READ CATEGORIES; PRECODED OPEN-END]

There is also inconsistency within the cell phone portion of the survey, and the procedure of not reading response categories is observed for Q50 (but not, as previously shown) for Q 53:

Q50. Do you know how much those fees would be? **[If YES, ASK: About how much would the termination fees be?] [DO NOT READ CATEGORIES; PRECODED OPEN-END]**

To make matters even more inconsistent with established survey procedures, at one point the researchers appear to have left the procedure up to the interviewer in the field by letting them decide whether it is necessary to read the answer categories, something that is almost never done:

Q60. What was the total of the termination fees you had to pay your old cell phone company to end service? **[IF NECESSARY: READ ANSWER CATEGORIES]**

1	\$1 to \$49
2	\$50 to \$99
3	\$100 to \$149
4	\$150 to \$199
5	\$200 or more
8	Do not know or remember how much fees were
9	(DO NOT READ) Refused

Thus, the survey departs both from accepted survey research procedure and from the approach followed in the first half of the questioning as well as Q50 by having the cost increase answer categories read to respondents in Q53 (and some of the time in Q60), potentially altering their answers.

Pushing further on the “bill shock” issue, the FCC press release and summary of the survey findings reported that:

“The survey finds that of the 30 million Americans who have experienced bill shock:

- 84 percent said their mobile carrier did not contact them when they were about to exceed their allowed minutes, text messages, or data downloads.
- 88 percent said their carrier did not contact them after their bill suddenly increased.”

This statement is based on Question 54:

<p>ASK IF BILL JUMPED SUDDENLY</p> <p>Q54. Now please tell me if your cell phone company has ever contacted you... [INSERT; READ AND ROTATE]? Have they ever contacted you... [INSERT NEXT ITEM]?</p> <p>a. When you were about to exceed your allotted minutes, text messages, or data downloads</p> <p>b. After your bill suddenly increased</p>
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Despite the reference to “30 million Americans,” only 391 people were asked these questions. There was no effort to qualify these 391 people for eligibility. They merely had to own a cell phone for personal use and to have reported a sudden, month-to-month increase. They were not restricted to being bill payers (or even being familiar with the bill), and so even if the bill payer had been contacted by the cell phone company, there is no particular reason everyone in the household would know that. In addition, as discussed further herein, respondents were not advised that it was fine to say they did not know.

Further, the survey found that 93 percent of consumers are very or somewhat satisfied overall with their wireless service, and that only 8 percent are not satisfied with their cell phone carrier’s customer service. If such contact from the cell phone company were important to consumers and did not occur when people thought it should, considerably more than 8 percent of consumers would likely report being not satisfied with cell phone customer service.

The FCC Survey, Particularly its Approach to Eligibility, Is Inconsistent with Established Survey Practices.

The survey significantly departs from well-established survey practices in a number of ways. Most important, standard survey practices ensure participants are only asked questions for which they have sufficient knowledge to respond. It is unrealistic to expect people to provide knowledgeable answers to questions about issues that they have not thought about. When people have not thought about an issue (possibly because it is not relevant or important to them) they are likely to guess or use information gleaned from the interviewer to formulate a response. The survey’s departure from these established procedures draws into question the accuracy of the FCC’s conclusions based on the survey.

First, adequate eligibility restrictions are not used throughout the survey, and the FCC approach is both flawed and inconsistent. In both portions of the survey (internet and cell phone questions), the researchers included questions to determine which of the people they were speaking with actually paid these two bills or might otherwise be familiar with them.

Specifically, Questions 14 and 15 from the internet portion of the survey and questions 41 and 42 from the cell phone portion of the survey are designed to gather this information:

- Q14. Do you usually pay the monthly bill for the internet service at home... does someone else usually pay the bill... or in some months you pay it and some months someone else does so?
- 1 I pay internet bill
 - 2 Someone else pays bill
 - 3 Some months I pay bill, some months others pay it
 - 4 Other **(SPECIFY)**
 - 8 **(DO NOT READ)** Don't know
 - 9 **(DO NOT READ)** Refused
- Q15. **[IF R DOES NOT PAY BILL (Q14=2,8,9), ASK:** Even if you do not personally pay the bill...] How familiar would you say you are with the monthly bill for your internet service at home... very familiar, somewhat familiar, not too familiar or not familiar at all?
- 1 Very familiar
 - 2 Somewhat familiar
 - 3 Not too familiar
 - 4 Not familiar at all
 - 8 **(DO NOT READ)** Don't know
 - 9 **(DO NOT READ)** Refused
- Q41. **[IF HAVE PERSONAL USE CELL PHONE AND HAVE TWO OR MORE CELL PHONES (Q35=2), ASK:** Still thinking about the cell phone you have for your personal use...] Who usually pays the bill each month for your cell phone? Do you pay the bill, or does someone else in your household or family pay the bill...**[IF HAVE PERSONAL USE CELL PHONE AND EMPLOYED (EMPL=1,2,5), ASK:** or does your employer pay the bill]?
- 1 R pays bill
 - 2 Someone else in household/family pays bill
 - 3 Employer pays bill
 - 4 Other **[SPECIFY]**
 - 8 **(DO NOT READ)** Don't know
 - 9 **(DO NOT READ)** Refused
- Q42. **[IF R DOES NOT PAY BILL (Q41=2-9), ASK:** Even if you do not personally pay the bill...] How familiar would you say you are with the monthly bill for your cell phone service... very familiar, somewhat familiar, not too familiar or not familiar at all?
- 1 Very familiar
 - 2 Somewhat familiar
 - 3 Not too familiar
 - 4 Not familiar at all
 - 8 **(DO NOT READ)** Don't know
 - 9 **(DO NOT READ)** Refused

These questions, as phrased, raise a number of concerns. The first point to be made is that the researchers switched from an objective criterion to determine eligibility to answer questions about bills and fees to a subjective one. The validity of survey data depends on clear and unambiguous communication between those designing the survey and those answering the questions. Therefore, asking a factual question about who pays the cell phone bill is far superior to using a subjective standard (judged familiarity) since the latter depends on the respondent's interpretation of what the interviewer means by "very" and particularly "somewhat" familiar as well as what the respondent considers each to mean. These answers are sufficiently subjective that the respondent does not know what the interviewer means. For example, when a survey respondent hears the words "very familiar" does the respondent believe that the interviewer means that a person carefully reviews the charges on a bill or only that the person typically sees the bill when it comes in and knows what types of information it contains? "Somewhat familiar" is far more ambiguous and lacks any reliable reference point. People may assume it means nothing more than the most general level of awareness.

Also, these researchers changed the typical subjective scale used to assess familiarity and knowledge when more objective measures are difficult to develop. The typical categories would be headed by "very familiar" and then "familiar." "Somewhat familiar" is further down the subjective scale of familiarity. It thereby invites people to choose that answer to avoid appearing uninformed by indicating a lack of familiarity (since remaining response categories are all on the "not familiar" side of the scale).

Finally, it is not clear why the researchers failed to follow-up the objective criterion (who pays the bill) in questions 14 and 41 with a straightforward objective question such as, "Do you personally look over the charges and fees on the bill?" Subjective criteria can differ a great deal from person to person, so an additional objective question like the above could have yielded more accurate results when used to determine who was eligible to answer questions.

In addition to adopting very loose and, in my view, inappropriate subjective criteria to determine eligibility to answer questions about cell phone bills and fees, the FCC's application of these criteria to the remaining questions raises concerns. Under the present circumstances, when asking about aspects of the household bill for these services, clearly those who pay the respective bills are appropriate people to ask, and a case could be made to include those who claim to be very familiar with the respective bills. Because "somewhat familiar" lacks any clear point of reference and could mean almost anything beyond "I don't pay much attention to it," it was not appropriate to designate people giving this response as eligible to answer questions about aspects of the bill. Instead, in my view, only those who pay the bill or who report being very familiar with it should be asked questions about details of the bill, including month-to-month changes and fees. None of the results reported by FCC are based on this appropriate combination of responses.

These criteria also are used inconsistently or dropped entirely during the survey. In the internet portion of the survey, the eligibility criteria for Q 16 are set forth below:

ASK IF Pays bill (Q14=1,3) or Familiar with bills (Q15=1,2)
Q16. Now I would like to ask you specifically about the bills you receive for YOUR INTERNET SERVICE at home.

So, when question 16 d asks about “Any fees you would have to pay if you switched to another internet company” only those who paid the internet bill or who report being very familiar or somewhat familiar with this bill are eligible to answer this question.

However, in the cell phone portion of the survey the eligibility criteria are inexplicably changed for some of the questions dealing with the bill or fees. They are the same as in the internet portion only for Q47:

ASK IF Pays bill (Q41=1) or Familiar (Q42=1,2)
Q47. Now I would like to ask you specifically about the bills you receive for YOUR CELL PHONE SERVICE. How clear is...[INSERT; READ AND RANDOMIZE] on your bill?
a. How much you are paying for cell phone service
b. How to contact the company if you have a question about the bill or the service
c. Any fees you would have to pay if you switched to another cell phone company
d. Whether there are any limits on your access to the internet using your cell phone

No such eligibility criteria are used for the following questions:

ASK IF R HAS PERSONAL USE CELL PHONE
Q49. Do you happen to know if you would have to pay your cell phone company a termination fee or penalty if you cancelled your current cell phone service?

ASK IF WOULD HAVE TO PAY TERMINATION FEE (Q49=1)
Q50. Do you know how much those fees would be? [If YES, ASK: About how much would the termination fees be?]

ASK IF R HAS PERSONAL USE CELL PHONE
Q52. Has your cell phone bill ever increased suddenly, from one month to the next, even if you did not change the calling or texting plan for your phone?

ASK IF BILL JUMPED SUDDENLY (Q52=1)
Q53. Do you happen to remember how big the most recent increase was?

ASK IF BILL JUMPED SUDDENLY (Q52=1)
Q54. Now please tell me if your cell phone company has ever contacted you... [INSERT; READ AND ROTATE]? Have they ever contacted you... After your bill suddenly increased?

Instead, the only eligibility criterion for these questions is whether the person has a personal use cell phone.

The “bottom line” with respect to eligibility criteria in this survey can be expressed as follows. First, relying on data regarding increases in cell phone bills or aspects of those bills (including fees) from everyone who owns a personal cell phone, regardless of whether they are sufficiently familiar with their household cell phone bills, is inappropriate. Second, when eligibility criteria are narrowed at all they are far too inclusive, allowing people who only report being “somewhat familiar” (perhaps so as not to appear uninformed) with their cell phone bills to be included. This makes the data from questions purporting to establish some type of “bill shock” (shown earlier not to assess shock or surprise) even more inappropriate, since they were asked of people who might not have much interest in or knowledge about the household’s monthly cell phone bills. Many of the “EARLY TERMINATION FEE” questions use the same “relaxed” eligibility criteria and hence suffer from the same problems.

Second, in most surveys, respondents would be told that it is fine to say they don’t know or have no opinion about any subject they are asked about. I have carefully examined the questionnaire made available by the FCC, and I cannot find any instruction to respondents that tells them it is acceptable to say they have no opinion or don’t know the answer to any question. Further, though the category “don’t know” appears on the questionnaire for data coding purposes for many questions, the interviewer is instructed not to read that possible response to survey respondents.

Some baseline indication of the amount of guessing throughout the survey might be gleaned from Question 50:

ASK IF WOULD HAVE TO PAY TERMINATION FEE (Q49=1)
Q50. Do you know how much those fees would be? [If YES, ASK: About how much would the termination fees be?]

When given the express opportunity to say they didn’t know the answer (which unfortunately was not the case for most questions), 51 percent said they did not know. By not making it seem appropriate or easy for respondents to indicate that they have no opinion or don’t know (in virtually all questions), the data is likely to be contaminated by guesses.

The Survey’s Approach to Questions about Early Termination Fees and Bills Is Badly Flawed.

The FCC press release reported that, “nearly half of cell phone users who have plans with early termination fees (ETFs) don’t know the amount of the fees they’re accountable for.” The summary added, “Among those who stated affirmatively that they would incur a fee if they tried to terminate service, many did not know what the fee would be.... For those with personal

cell phones, 54% said they would have to pay an ETF and 18% did not know whether they would have to pay a fee.” The summary of the survey prepared by FCC staff appears to conclude that this lack of knowledge may be due to a lack of bill clarity. “As noted, many cell phone users do not know if they have to pay an ETF and many, if they are aware that an ETF applies, do not know its level. One possible reason for this: consumers’ cell phone bill may not be clear enough, to some people at least, so they can acquire and understand information about ETFs.” This analysis, however, has a number of flaws.

As an initial matter, valid surveys typically ask a lead-in question that establishes the relevance of a line of questioning to each respondent (*i.e.*, qualifying the respondent). Doing so would be standard procedure. As noted above, most of the questions dealing with ETFs were asked of everyone who happened to own a cell phone and not of the subset of people who paid the bill or reported being very familiar with the bill or the subset of people who had knowledge about such fees. Only question 47 (presented above) restricts eligibility in any meaningful way, but unfortunately it includes those saying they were only “somewhat familiar” with their cell phone bill (in addition to those who either paid the bill or said they were “very familiar” with it). With respect to the other questions, there was no attempt to screen out people who had little knowledge about their bills or such fees. Oddly, in my opinion, the two questions that could have been used to identify a subset of people who were interested in ETFs appear near the end of the section dealing with ETFs and were never used for this purpose:

<p>ASK IF R HAS PERSONAL USE CELL PHONE</p> <p>Q55. Now thinking about the past three years, have you switched your cell phone service from one company to another?</p> <p>ASK IF have not switched</p> <p>Q56. In the past three years, how seriously have you considered switching cell phone companies? Would you say... (READ)</p> <p>1 Very seriously,</p> <p>2 Somewhat seriously,</p> <p>3 Not too seriously, OR</p> <p>4 Not at all seriously? (INTERVIEWER: if R volunteers “Have not considered”, code as Punch 4)</p> <p>8 (DO NOT READ) Don’t know/Someone else makes those decisions</p> <p>9 (DO NOT READ) Refused</p>
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As I indicated, it is unrealistic to expect people to provide knowledgeable answers to questions about issues that they have not thought about, and so the value of qualifying respondents (as in Q56) is obvious. When people have not thought about an issue (possibly because it is not relevant or important to them) they are likely to guess or use information gleaned from the interviewer to formulate a response. For example, if a set of questions about some issue were asked, and they were followed by a question asking whether that issue was important, respondents, particularly those who have no real knowledge or opinions about that issue, are likely to answer that the issue is important—simply because the interviewer wouldn’t be asking

so many questions about it unless it was important. As I will point out a bit later, that problem exists in the present survey.

Further, whether cell phone customers do or should expect to see such non-incurred fees on their monthly bills seems to be an open question. People were not asked whether they expected to see such information or thought it was necessary to include ETFs on their bills as long as that information was easily available to them in material describing their plan/contract. Only 4 percent said that it was not clear how to contact the company if they had a question about the bill or service. This strikes me as exceptionally good communication from wireless companies, and people should feel comfortable about obtaining information when it is relevant to their decisions.

In addition, there are a number of flaws associated with specific ETF questions and the FCC's interpretation of those questions. First, flawed procedures can be seen in question 48 that asks participants how easy it would be to switch wireless carriers.

ASK IF R HAS PERSONAL USE CELL PHONE	
Q48.	If you wanted to do so NOW, how easy do you think it would be to switch from your current cell phone company to another company... very easy, somewhat easy, somewhat difficult, very difficult or could you not do it at all? <i>{new}</i>
1	Very easy
2	Somewhat easy
3	Somewhat difficult
4	Very difficult
5	Could not do it/It is impossible/Not available
6	(DO NOT READ) Would not do it
8	(DO NOT READ) Don't know
9	(DO NOT READ) Refused

In addition to failing to tell respondents that if they have no opinion they should say that (see discussion above), the interviewer does not read two relevant answers (“Don’t know” and “Would not do it”), making it much less likely that respondents would provide those answers. This leads people to make a choice from among the four answers that were read to them even if they really had no opinion or knowledge about this issue. Consider the accepted survey approach in which people are first qualified by asking them something like: “Have you ever thought about switching from your current cell phone company to another company?” Those who respond “yes” presumably have devoted at least a minimal amount of thought to how easy or difficult they expected such a switch to be. They should have been the only ones asked a follow-up question.

Question 49 displays a flaw in question design as well as the previously discussed failure to properly qualify people:

ASK IF R HAS PERSONAL USE CELL PHONE	
Q49.	Do you happen to know if you would have to pay your cell phone company a termination fee or penalty if you cancelled your current cell phone service?
1	Yes, would have to pay fees
2	No, would NOT have to pay fees
8	(DO NOT READ) Don't know
9	(DO NOT READ) Refused

This question is poorly worded and the answers are ambiguous. Consider what the response “no” means given the wording of the question (“Do you happen to know if.....”). “No” would seem to mean “I don’t know,” but it is coded as meaning “No, would NOT have to pay fees.”

As pointed out earlier, anyone having a personal cell phone was deemed eligible to answer this question, even if they paid no attention at all to their cell phone bills or fees, possibly because someone else in the household had accepted that responsibility. There is no attempt to qualify people by asking them something like, “Have you ever thought about whether there are any fees associated with cancelling your current cell phone service?” The interviewer does not tell them that it is fine to say “I don’t know” or “I have no opinion” about this issue, despite the fact that these may be the most accurate responses.

As already demonstrated, failure to properly qualify people to be sure they had the knowledge to answer bill-specific questions combined with the failure to indicate that it was fine for them to say they had no opinion or did not know the answer, leads to both guessing and answers based on question wording and question order. Question 50 asks participants to indicate whether they know how much their ETF will be and, if so, to identify that amount. 51 percent said they did not know. My own assessment is that even this figure is unrealistically low because it would be unusual for consumers to walk around with such detailed information in their heads, ready to be retrieved. Based on my 40 plus years as a consumer behavior researcher, including the design of a major national study to determine how familiar smokers were with the tar levels of the cigarette they currently smoked (presumably an important and relevant piece of information—and where 79 percent did not know the answer despite its appearance on packages and in advertising), I doubt that even 20 percent of people would actually know how much these fees were prior to revisiting the written information about their plans. As long as people know where to find such information at the time they wanted to think about it, that would seem sufficient to making good decisions. And, that would be a far more realistic standard than expecting most cell phone users to walk around with that information in their minds. In that regard, I noted earlier that only 4 percent said that it was not clear how to contact the company if they had a question about the bill or service.

Question 51 asks about the importance of ETFs in people's decisions to refrain from leaving their current cell phone company.

ASK IF R HAS PERSONAL USE CELL PHONE

Q51. What are some reasons you would KEEP your current cell phone company, even though you might have seriously considered switching companies? Would **[INSERT ITEM AND RANDOMIZE]** be a major reason, a minor reason, or not a reason at all for keeping your current cell phone company? How about **[INSERT NEXT ITEM]**?

[READ IF NECESSARY: Was this a major reason, a minor reason, or not a reason you would keep your current cell phone company?]

ASK ITEM A FIRST, THEN RANDOMIZE

- a. Paying termination fees to your current cell phone company

The structure of the questionnaire is likely to produce a bias in the direction of people saying that ETFs are important. A set of questions in the initial, internet portion of the survey conveyed the importance of ETFs by repeated questions about them (e.g., Q16d, 25, 26, 27a, 31, 32, 33), with Q 27 being identical to Q51a except for the substitution of cell phone company for internet provider. Then, in the cell phone portion of the survey, people had already been asked up to two questions (Q49, shown above, and Q50, which attempts to quantify how much those fees would be) prior to being asked Q51 to assess whether such fees are important (*i.e.*, a reason to keep your current cell phone company). It is not reasonable to expect the drumbeat of prior questions about ETFs to have no impact on how people will answer Q51. The repetitive questioning about such fees in the survey has communicated that such fees must be important, hence biasing the answers to Q51. In addition, those respondents who indicated that ETFs were important enough to be reasons to keep their current internet providers would likely have the added motivation to appear consistent in how they regarded similar fees for keeping/switching cell phone providers.

EXHIBIT 5

**RESPONSE TO PRINCETON SURVEY RESEARCH ASSOCIATES INTERNATIONAL'S
SEPTEMBER 3, 2010 EX PARTE FILING**

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Distinguished Service Professor Emeritus
University of Florida

On September 3, 2010, Princeton Survey Research Associates International submitted a reply to my analysis of the survey it conducted for the FCC on consumers' wired and wireless experiences. This reply is remarkable both for its admissions and its failure to adequately address the many flaws in the survey. The survey was not, as PSRAI claims, "designed and conducted in line with the best practices of telephone survey research in America today." To the contrary, many aspects of its survey conflict with recommended standards for survey research. PSRAI's reply only confirms that its survey cannot be used to draw conclusions about consumers' wireless experience.

1. PSRAI acknowledges making a decision not to use the term "bill shock" ("That term was not used in the survey.") when asking consumers questions in the FCC-commissioned survey that was then used by the FCC to advance the proposition that 30 million Americans experienced "bill shock." My earlier analysis correctly noted that since people were never asked about "bill shock" it was inappropriate to suggest that this proposition was based directly on results from the survey, as the FCC had done: "Today, the Federal Communications Commission released the findings of an agency survey on the consumer mobile experience. The survey indicated that 30 million Americans – or one in six mobile users -- have experienced "bill shock," a sudden increase in their monthly bill that is not caused by a change in service plan." If the Commission wanted to rely on the survey, it should have faithfully reported what was asked of respondents rather than injecting a term with a different implied meaning, as if that was based on the survey's results. If the Commission wanted to draw a conclusion about "bill shock," then the survey should have asked about "bill shock." PSRAI's research standards are put into question by allowing the survey it designed and conducted to be misrepresented by the FCC.
2. PSRAI complains that Verizon Wireless improperly concluded that the survey does not supply a valid factual basis for drawing conclusions about wireless customers' experience because of methodological and other problems with the survey. At the same time, PSRAI fully admits that my "criticisms are generally reasoned and supported by [my] views of survey research." Then, adding further confusion, it claims that "some" basic criticisms of the data collection procedures (leaving these vague) could be countered by further analysis of the survey data. It is a fundamental axiom in all research that data rendered invalid or unreliable because of improper research procedures cannot be used to redeem flawed methodology. It would be as if an FDA panel rejected a study in support of a new drug because it was inadequately done, but then those designing the study objected because the data analysis supported their application.
3. PSRAI says, "Despite the *Reply Comments*' repeated references to the survey's methodology, the Cohen report does not analyze or comment upon the major elements of the survey's methodology." In making this assertion, PSRAI restricts the basic elements of survey methodology to sample design, call design, sample execution, sample dispositions and weighting. It seeks, presumably, to rule out all other grounds for determining that the data are likely to be invalid or unreliable. Thus, in its view, apparently as long as the "right people" are

included in the survey sample, the questions that are asked, how and of whom they are asked, and restrictions on how respondents are permitted to answer questions are not appropriate criticisms of its survey's "basic methodology."

This position directly contradicts authoritative treatises on survey research. For example, the chapter on survey research in the 2000 *Handbook of Research Methods in Social and Personality Psychology*¹ conceptualizes how survey methodologists think about the factors that lead to "error" in surveys. It identifies four main sources of error: coverage error (essentially failing to include subpopulations who are important to the issue at hand), sampling error (essentially random differences between the selected sample and the population from which it was selected), non-response error (essentially the bias that can result when data are not collected from all members of a sample), and measurement error. The latter refers to all distortions that result from inadequate questionnaire design, including cues that can lead people to respond one way or the other, biased question wording or response options. These latter aspects were, by and large, the focus of my report, and they cannot be wished away by appealing to adequacy in the other dimensions of survey methodology. Indeed, it has been exceedingly well established that, "Measurement is a sine qua non of any science,"² meaning that however well a study represents a population of interest, biases created via a questionnaire and interviewing procedures cannot be overcome.

The fatal weakness of PSRAI's position is also revealed by considering a hypothetical survey in which all members of the population of interest were interviewed (e.g., all members of a group slated to vote on a particular issue). Since all members of the group were interviewed, doing that takes PSRAI's views of "basic methodology" (selecting and interviewing the correct sample) off the table. In PSRAI's view, this would imply that no matter how the interviewing was carried out and no matter what the biases would be, from a methodological standpoint the survey meets necessary standards. As a result of this failure to grasp the essential role of measurement in producing trustworthy data, even though it first concedes, "Questionnaire structure and question wording are critically important in every survey," it then asserts that my report "does not criticize the poll's basic methodology." My criticisms, however, are directed at flaws in PSRAI's methodology that threaten the validity of the data. This is not (as PSRAI suggests) a mere difference of opinion among qualified experts. My criticisms reflect leading authorities' view on fundamental survey procedures.

4. PSRAI claims that, "The survey for the FCC was designed and conducted in line with the best practices of telephone survey research in America today." As I showed in my initial report, however, this survey did not meet several well-established best practices for survey research. To aid courts in determining the adequacy of surveys, the *Reference Guide on Survey Research* was developed by the Federal Judicial Center and has become the basic, authoritative source for

¹ Harry T. Reis & Charles M. Judd (editors), *Handbook of Research Methods in Social and Personality Psychology*, Chapter 9, "Survey Research" (written by Penny S. Visser, Jon A. Krosnick & Paul J. Lavrakas), page 225, Cambridge University Press, 2000.

² Peter H. Rossi, James D. Wright & Andy B. Anderson (editors), *Handbook of Survey Research*, Chapter 3, "Measurement" (written by George W. Bohrnstedt), page 69. Academic Press, 1983.

such determinations. The *Reference Guide* devotes substantial attention to the role of inadequate questionnaire design as a major factor in assessing the methodological adequacy of a survey. We can therefore use the *Reference Guide* to assess PSRAI's defense.

- a. Consistent with my report, the *Reference Guide* takes particular note of allowing people to answer questions when they are not sufficiently familiar with the issue. It points out that respondents "obligingly may supply an answer," but that "Such answers will reflect only what the respondent can glean from the question, or they may reflect pure guessing. The imprecision introduced by this approach will increase with the proportion of respondents who are unfamiliar with the topic at issue."³

An important criticism that I raised is that, "In the FCC survey researchers did not inform participants that it is fine to say they don't know or have no opinion about any subject they are asked about. When such answers actually appeared on the questionnaire, researchers were instructed NOT to read those options to respondents. The survey data therefore is likely to be contaminated by guesses." An example given in my report (though the same problem exists throughout the questionnaire) was:

Q. 53	Do you happen to remember how big the most recent increase was? Was it...(READ)
1	\$1 to \$24
2	\$25 to \$49
3	\$50 to \$74
4	\$75 to \$99, OR
5	\$100 or more?
8	(DO NOT READ) Don't know
9	(DO NOT READ) Refused"

The PSRAI response to this is, "All respondents to the survey were allowed to say they do not know the answer to a question or to refuse to answer the question." Allowing people to say something, but not informing them that it is ok to report not having an opinion or not knowing the answer hardly meets the guidelines provided to overcome pure guessing in the *Reference Guide*: "...the survey can use a quasi-filter question to reduce guessing by providing "don't know" or "no opinion" options as part of the question (e.g., 'Did you understand the guarantee offered by Clover to be for more than a year, a year, or less than a year, or don't you have an opinion?'). By signaling to the respondent that it is appropriate not to have an opinion, the question reduces the demand for an answer and, as a result, the inclination to hazard a guess just to comply. Respondents are more likely to choose a 'no opinion' option if it is mentioned explicitly by the interviewer than if it is merely accepted when the respondent spontaneously offers it as a response. The consequence of this change in format is substantial."⁴

³ Shari S. Diamond, *Reference Guide on Survey Research*, Federal Judicial Center, 249-250 (2004) ("Reference Guide on Survey Research").

⁴ Reference Guide on Survey Research at 250.

PSRAI's assertion of using "best practices" in designing the FCC survey is clearly contradicted by comparing its methodology against the most frequently used set of standards.

- b. PSRAI also objects to my statement that "reading respondents a list of dollar amounts of the size of the bill increase could have biased the results." PSRAI argues that using this format for the question was valid. PSRAI ignores the substance of my criticism.

To illustrate the bias involved in questions that supply respondents with answer categories that exceed the numerical range of answers they might have given (were the questions instead open-ended), the *Reference Guide* provides this example: "According to a competitor, the commercial deceptively implied that each woman in the test rated more than one shampoo, when in fact each woman rated only one. To test consumer impressions, a survey might have shown the commercial and asked an open-ended question: 'How many different brands mentioned in the commercial did each of the 900 women try?' Instead, the survey asked a closed-ended question; respondents were given the choice of "one," "two," "three," "four," or "five or more." The fact that four of the five choices in the closed-ended question provided a response that was greater than one implied that the correct answer was probably more than one."⁵ Further, as the *Reference Guide* points out, "in telephone surveys, respondents are more likely to choose the last choice offered (a recency effect)."⁶ Again, the PSRAI response is not consistent with established best practices.

- c. PSRAI now argues that I should have been responsible for contacting them to see whether the way the questions were read to respondents were exactly as reported in the questionnaire. This is a strange assertion, suggesting that we cannot take the information supplied at face value. The *Reference Guide* makes clear that all interviewer instructions should have been made clear and available: this is the responsibility of those offering the survey as evidence.⁷

⁵ Reference Guide on Survey Research at 252.

⁶ Reference Guide on Survey Research at 255.

⁷ Reference Guide on Survey Research at 270-271 ("The completeness of the survey report is one indicator of the trustworthiness of the survey and the professionalism of the expert who is presenting the results of the survey. A survey report generally should provide in detail: . . . 5. the exact wording of the questions used, including a copy of each version of the actual questionnaire, interviewer instructions, and visual exhibits...").

For example, I made the following point based on the information for interviewers actually appearing on the questionnaire, and which, presumably, interviewers were instructed to follow. “To make matters even more inconsistent with established survey procedures, at one point the researchers appear to have left the procedure up to the interviewer in the field by letting them decide whether it is necessary to read the answer categories, something that is almost never done”:

Q60.	What was the total of the termination fees you had to pay your old cell phone company to end service? [IF NECESSARY: READ ANSWER CATEGORIES]
1	\$1 to \$49
2	\$50 to \$99
3	\$100 to \$149
4	\$150 to \$199
5	\$200 or more
8	Do not know or remember how much fees were
9	(DO NOT READ) Refused

Now PSRAI says: “Dr. Cohen’s criticism of Question 60 is simply one of misunderstanding. While Dr. Cohen reads the interviewer instructions one way, the interviewers are in fact trained to read the question and accept an unaided answer. Only if the respondent had trouble with the question would the response categories be read. This is a standard prompting technique in interviewing.”

Simply put, my original report is correct in that the matter was left to interviewers in the field to decide, somehow, that respondents did or did not need the prompting of a preset number of answer categories. Furthermore, contacting PSRAI could not possibly establish how many or which respondents had these categories read to them and how many responded in a more unaided fashion. The standard is clear: it should be done one way or the other, depending on validity considerations, and the choice should be predetermined rather than left up to interviewers, who should not be responsible for questionnaire design.

5. PSRAI further states that “The complete survey results, questionnaire, methodology and the survey data itself have been fully disclosed and are available online.” It then contradicts itself and presents a new analysis using data that it did not present in the original report. PSRAI presents this new analysis to respond to an important criticism (i.e., that respondents with insufficient personal knowledge were being asked certain questions), seemingly acknowledging the validity of the criticism. The fact remains that the criticism is correct and that the original presentation was flawed because it included a great many people who likely had insufficient knowledge about the details of these bills. They merely had to own a cell phone for personal use to be asked these questions. PSRAI’s defense rings hollow: “The determinations of which respondents were asked which questions in this survey are based on well-considered judgments and careful design.” Claiming that these newly presented data (for a more appropriate analysis that it did not choose to present in the original report of survey findings) were available online is misleading because there was no straightforward way for an outside expert to cross-tabulate answers to any question by a subset of the sample who actually paid their cell phone bills. PSRAI

had the data that made these new cross tabulations possible and presumably shared the data (and possibly the cross tabulations) with its FCC client, but they were not presented in the original report.

The researchers continue to violate accepted procedures even when presenting the new data (in a table) by failing to say how many (or how few) people were included in the more appropriate sub-sample analysis. As a result, there is no way to determine if the size of this group was sufficient to justify relying on these data, even assuming other aspects of the methodology were sound. That leaving this information out violates standards for surveys submitted for judicial review is not merely another expert's opinion; it is contained in the Federal Judicial Center's guidelines.⁸

⁸ Reference Guide on Survey Research at 270-271 ("The completeness of the survey report is one indicator of the trustworthiness of the survey and the professionalism of the expert who is presenting the results of the survey. A survey report generally should provide in detail: . . . 8. statistical tables clearly labeled and identified as to source of data, including the number of raw cases forming the base for each table, row, or column...").

EXHIBIT 6

**THE GAO SURVEY:
WHAT THE DATA CAN TELL US ABOUT “UNEXPECTED” WIRELESS CHARGES
AND CONSUMER BILLING CONCERNS**

**Joel B. Cohen, Ph.D.
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I am a *Distinguished Service Professor Emeritus* at the University of Florida. I received my B.S. in Business Administration, MBA with a focus in Marketing, and Ph.D. in Business Administration/Marketing with the supporting Field of Social Psychology from U.C.L.A. I have published many highly cited articles and book chapters on psychological processes that are important in attitude formation and consumer decision making along with a variety of other consumer behavior topics in a number of leading journals including the *Journal of Consumer Research*, *Journal of Marketing Research*, and *Journal of Consumer Psychology* as well as a number of other edited volumes including authoritative handbooks in my field. In addition, I was recently awarded the Distinguished Service Award for lifetime achievements in scholarly research by the *Journal of Consumer Research* as well as that journal’s “Best Article Award.” I served as the Editor of the *Journal of Public Policy & Marketing* and as the President of the Association for Consumer Research, the leading scholarly organization in the field. Prior to joining the University of Florida as Marketing Department Chairman in 1974, I served as Director of Social and Behavioral Science Research at National Analysts and before that as a tenured professor at the University of Illinois. I have been a consumer behavior and survey research consultant to the Federal Trade Commission and other U.S. and Canadian investigatory and regulatory bodies. Among other projects, I was selected by the National Cancer Institute to design and carry out a national survey to help establish consumers’ understanding of cigarette health risks and to present these findings to the President’s Cancer Panel.

INTRODUCTION AND SUMMARY

I have been asked, by Verizon Wireless, to review certain data from the November 2009 GAO survey along with possible inferences that the GAO and FCC might draw from those data. I previously supplied comments to the FCC regarding underlying survey research support for the FCC’s May 26 news release that incorrectly reported, among other things, that: “The Federal Communications Commission new survey of American consumers of broadband and cell phone service finds that one in six cell phone users has experienced ‘bill shock’ . . . This translates into approximately 30 million Americans who have at one time had ‘bill shock’ on their monthly bill.” That survey, in fact, never asked respondents whether they had experienced “bill shock” or even “surprise” about their wireless bills.

The GAO survey is apparently being used to fill in some information gaps that might then support regulatory initiatives. Questions were asked about consumer satisfaction, including the accuracy and clarity of billing and charges for wireless service. In addition, consumers were asked whether charges appearing on such bills were unexpected and whether problems were resolved when they contacted their wireless service providers.

The GAO Report summarizes the survey responses related to billing as follows on page 11:

“We estimate that during this time about 34 percent of wireless phone users responsible for paying for their service received unexpected charges and about 31 percent had difficulty understanding their bill at least some of the time.”

A careful analysis of the survey, however, demonstrates that the survey (1) had an extremely low response rate (that prevents any confident projection to the larger cell-phone population), (2) improperly relied on participant recall, and (3) possessed a number of flaws that produce biased responses. Therefore, the factual support for the 34 percent and 31 percent figures as estimates of unexpected charges and reported difficulty understanding of bills (especially in the larger population of wireless users) is inadequate. In addition, the questions that were appropriately structured show that consumers are satisfied with their wireless service and that carriers are responding to customers’ billing concerns when they do arise.

VERY LOW SURVEY RESPONSE RATES CAN PRODUCE BIASED DATA

Data came from 1,143 people who were 18 years of age or older and who had cell phone service in 2008. They were selected using randomized methods as part of a nationally representative survey of a combination of households and working cell phone numbers, using generally accepted sampling and weighting procedures. Defending the rigor of the sampling, page 34 of the GAO report says:

“Because we followed a probability procedure based on random selections, our sample is only one of a large number of samples that we might have drawn. Since each sample could have provided different estimates, we express our confidence in the precision of our particular sample’s results as a 95 percent confidence interval. This is the interval that would contain the actual population value for 95 percent of the samples we could have drawn. As a result, we are 95 percent confident that each of the confidence intervals in this report will include the true values in the study population.”

That is correct only in the abstract. The statement assumes, but does not state, an important caveat. Suppose that such a sample is drawn using the identical probability sampling procedures. But now suppose that the survey research organization is not able to reach a very high percentage of the people selected under the probability sampling procedure and/or that a great many of these people do not choose to participate in the study. Indeed for very low survey response rates it can be misleading to talk about the results in the above manner. The term “true value” has little objective meaning if there is no way to be confident that the people

who were ultimately included in the study would have provided similar answers to the people who were originally part of the sample but did not participate.

An example of a probability sample among dentists provided in the 2004 Federal Judicial Center's "Reference Guide on Survey Research" clarifies the matter and supports my analysis: "Actually, since survey interviewers would be unable to locate some dentists and some dentists would be unwilling to participate in the survey, technically the population to which this sample would be projectable would be all dentists with current addresses who would be willing to participate in the survey if they were asked." (page 243)

This might be a trivial objection were the response rate in a survey to be very high (e.g., successful in capturing those dentists selected, on a random basis, for the study). If the response rate is very low, on the other hand, the terms "true values" and "actual population values" as used in the report can misrepresent the projectability of the results. If a survey is not projectable to the larger population of interest, it would be inappropriate to characterize the survey's results as "true" with respect to that larger population. There simply is no way of knowing what the "actual population values" are from a non-projectable survey. So, how does the present survey fare on this essential aspect of sound surveys?

In fact, 68 percent of those originally selected for the survey did not participate, and only 32 percent of those selected did participate. The report refers to this 32 percent as the survey response rate. Only data from the minority 32 percent are used to draw conclusions about the issues addressed in the questions.

The Federal Judicial Center's *Reference Guide on Survey Research* has this to say about acceptable standards for surveys that are to be introduced into evidence:

"Potential bias should receive greater scrutiny when the response rate drops below 75%. If the response rate drops below 50%, the survey should be regarded with significant caution as a basis for precise quantitative statements about the population from which the sample was drawn." (page 245, emphasis added)

Response rates have been trending down for some time, and a considerable reason for that is the availability of household electronic screening of incoming telephone calls. That leads people with less interest in being interviewed or simply less interest in being disturbed to fail to be included in telephone surveys. By 2000, response rates in well conducted surveys were about 50 percent, and they approached 48 percent by 2003 (Richard Curtin, Stanley Presser and Eleanor Singer, "Changes in Telephone Survey Nonresponse Over the past Quarter Century," *Public Opinion Quarterly*, Vol. 69, Spring 2005, pp. 87-98). Still, the recommendation of Federal Judicial Center's *Reference Guide on Survey Research* is sound because the difficulty of obtaining representative and projectable survey data should have no bearing on whether it is appropriate to consider such data as accurate, when making judgments and recommendations about the larger population.

On the initial page of the E-supplement to GAO-10-34 the authors say:

“We conducted an analysis of the final weighted estimates from our survey designed to identify whether our results contain a significant level of bias because our results inherently do not reflect the experiences of those who did not respond to our survey—i.e., a nonresponse bias analysis. Because we did not identify obvious levels of bias in the final weighted estimates at the national level we chose to include these estimates in this e-supplement.”

Appendix I to the GAO Report is a bit more forthcoming about this potential deficiency of the survey and it makes it clear that the researchers were aware of the problem, if not concerned about it:

“While we identified evidence of potential bias in the unadjusted weighted estimate, the final weighting adjustments appear to address this potential bias, and we did not observe the same level of bias when examining the final weighted estimates.” (page 44, emphasis added)

What did the researchers do to satisfy themselves that bias is not a problem, not simply that the “same level of bias” is not present using sample weighting procedures? They compared reported cell phone usage in this survey against similar estimates from the 2008 National Health Interview Survey. But if any sources of bias are uncorrelated with mere cell phone use (e.g., differences among cell phone users in the mix and magnitude of services used including frequency of roaming, differences in the desire to participate because they have nothing that concerns them to communicate), this approach will not solve the problem.

There is ample evidence that non-responders are often different than people who choose to participate. The Federal Judicial Center’s *Reference Guide on Survey Research* adds:

“Even when a sample is drawn randomly from a complete list of elements in the target population, responses or measures may be obtained on only part of the selected sample. If this lack of response were distributed randomly, valid inferences about the population could be drawn from the characteristics of the available elements in the sample. The difficulty is that nonresponse often is not random, so that, for example, persons who are single typically have three times the “not at home” rate in U.S. Census Bureau surveys as do family members.” (page 245)

In addition to the fact that non-responders are often more difficult to reach because they appear to work longer hours, they frequently have different demographic characteristics (e.g., live in large cities). This seems particularly important for the matter at hand, since wireless cell phone use can be expected to vary with differences in characteristics of responders and non-responders. In addition, willingness to participate in a study often varies with people’s beliefs and attitudes concerning the issue under study. So, for example, those who believe they have very little to communicate (e.g., because of an absence of problems or grievances and higher levels of satisfaction) are less willing to take the time to participate. This can produce a substantial bias when response rates are as low as they are here—32 percent.

There are a number of traditional ways to reduce non-response bias in surveys including using more persistent call-back procedures, more flexible scheduling of interviews and paying a sufficient number of non-responders to participate so that any differences in their responses can be better identified (using that as a comparison sample). As things stand, there is an acknowledgment of likely bias in the report, and the potential and magnitude of bias has only been gauged on one measure—cell phone usage. Accordingly, there doesn't seem to be a satisfactory way to create a scientifically valid confidence interval around most of the substantive data in this survey. The degree of projectability of these survey results to the larger wireless user population cannot be determined, meaning that considerable risk could be involved when basing assessments and recommendation on the data.

A DIRECT TEST OF BILL CLARITY IS FAR SUPERIOR TO A SELF REPORT SURVEY QUESTION

People were asked: "Since the beginning of 2008, how often, if at all, have you had difficulty understanding your wireless phone service bill or statement of charges?" This requires people to search their memories for whatever they might recall given an abstract retrieval cue. Most people quickly realize how difficult that task is, and so they are likely, instead, to choose one of the response categories that sounds reasonable. So, while 66 percent said "none of the time," 24 percent said "some of the time" and 5 percent and 2 percent said "most" or "all of the time," respectively. (Those in the latter two response categories may also be people who simply pay the bill and who know that they don't attempt to understand the various charges.) Based on the scholarly literature on memory and recall, the procedure adopted in this survey is a very challenging recall task. It is unlikely that bill payers bother to commit any such transient cognitive responses (e.g., "What is this item?") to memory unless the thoughts themselves evoked emotion or easy to recall behaviors that were associated with a non-understood charge. Even then, much more recent experiences are far easier to recall.

Accordingly, most people will fail to actually recall any specific difficulty in understanding. That may lead them to say "none" or, most likely, to imagine/assume that there "must" have been some times when they didn't understand something. Moreover, they are likely to assume that the reason this question is included in the survey is because the researchers believe most people have at least some difficulty, some of the time. The results for this question are little more than guesses and should be accorded no scientific legitimacy.

If one wished to determine if the bills or information on them is clear, the proper procedure is to give bills to people, have people look them over, and then see if they correctly understand the information they were given. Comprehension studies are commonly done, and I have been involved in such studies for regulatory agencies.

While a direct test of bill clarity would have been the best approach for getting around the recall problem and determining whether participants had difficulty understanding their wireless bills, the survey also could have better screened participants to ensure that they are sufficiently familiar with their bills to answer questions about clarity or confusion. Standard survey practices ensure that participants are only asked questions for which they have sufficient knowledge to respond. It is unrealistic to expect people to provide knowledgeable answers to

questions about issues that they have not thought about. This survey asks people about their difficulty in understanding their wireless bills, whether those bills have been inaccurate and whether they received charges on their bills that were unexpected. Eligibility to answer these questions was based on answers to question 23: “Who is primarily responsible for paying for your wireless phone service?” People were deemed to be eligible if they reported either being primarily responsible or sharing that responsibility with someone else. The survey therefore assumed that participants who paid their monthly bills were familiar with the substance of those bills. In fact, in a great many households bill paying/check writing is almost an automatic process, with one person agreeing to take on that role. The review of bills for their accuracy and consistency with a purchase agreement is often carried out, not by the bill payer, but by the person primarily responsible for that category or type of expenditures (e.g., medical plan bills). In such households it would be incorrect to assume that the person who pays the wireless phone bill is the person who looks them over. There is no reason that properly screened respondents could not have been selected to answer more detailed question about these bills.

DIFFICULT MEMORY TASKS AND ONE-SIDED RESPONSE OPTIONS LEAD TO UNRELIABLE DATA

Psychologists who are considered experts in survey research (e.g., chapter authors in Hans-J. Hippler, Nobert Schwarz, and Seymour Sudman, *Social Information Processing and Survey Methodology*, Springer-Verlag, 1987) have closely examined the role of memory in the validity of people’s answers. One well-observed finding is the “apparent failure of people to correctly assess the frequency of past events,” and there is now ample literature that documents and explains the problem. I did not find an explanation in the report for why the sequence of questions I am reviewing forced people to try to recall events that happened “Since the beginning of 2008...” (which is how each of questions 24, 25 and 26 begin). It is quite difficult to expect people to produce accurate recall of details associated with one of many bills each household paid over a two-year period of time. The further back in time, the fuzzier the recall, and the more likely people are to rely on hunches or assumptions or, in fact, to try to answer the question not via recall at all but by relying on the response options provided in the questions. It is unreasonable, for example, to assume that people will be able to accurately recall—for monthly bills over a two-year period—what they expected the charges to be and whether the actual charges were about as expected. Accordingly, a very high percentage of responses to these over-time frequency questions are guesses or answers that reflect how the questions were presented as well as the response categories read to people. I shall illustrate these problems below.

When the questionnaire poses questions 24, 25 and 26, it departs markedly from the approach used earlier. Question 15 is referred to by survey experts as a balanced question format (e.g., Shaeffer, Krosnick, Langer and Merkle, “Comparing the Quality of Data Obtained by Minimally Balanced and Fully Balanced Attitude Questions,” *Public Opinion Quarterly*, Vol. 69, Fall 2005, pp. 417-428). Let me illustrate the difference (and the problems created by using a poorly balanced question format) by inserting questions 15 and 24.

Q15: How satisfied or dissatisfied are you with the accuracy and clarity of the billing or charges for your wireless phone service?

Q24: Since the beginning of 2008, how often, if at all, have you had difficulty understanding your wireless phone service bill or statement of charges?

The format used in question 15 provides both sides (i.e., “satisfied or dissatisfied”) emphasizing them equally. It is fully balanced. Question 24 (along with questions 25 and 26) does not present the second, opposing, option in a balanced way. The unstated option is that “you did not have difficulty understanding your wireless phone service bill or statement of charges.” Saying “how often if at all” places the stress on the frequency of the occurrence rather than whether it occurred. “If at all” does not adequately balance the question because the form of the question implies that the survey’s interest is in the frequency of occurrence—hence the unstated premise is that “the event must occur for most people.” While it appears that the researchers attempted to be “efficient” by combining a “whether or not” question with a frequency question, this was not successful. And, in the format used, it biases responses in the direction of reporting difficulty rather than no difficulty. Questions 25 and 26 suffer from the identical problem:

Q25: Since the beginning of 2008, how often, if at all, have your wireless phone service bills or charges ever been inaccurate?

Q26: Since the beginning of 2008, how often, if at all, did you receive charges related to your wireless phone service that you did not expect?

There is almost no better way to lead people to select the response category “some of the time” than to foreclose recall as a viable question-answering option by making recall especially difficult. If people say to themselves, “Though I can’t recall, it must have happened even just once in over two years”, they are forced to select “some of the time.” For that reason, many survey experts prefer to leave questions such as this open-ended, in order not to exert a bias on people’s answers.

Note that people are not provided with a response option such as “hardly ever” or something similar that they could choose if they considered an event to be very infrequent. Survey researchers think about a set of response options where, in essence, there is only one “no/did not occur” option and three “yes/did happen” options as extremely biasing. Aside from the obvious fact that the chances of finding evidence for an occurrence are much higher in such cases even if people choose randomly, the use of a one-sided scale communicates to respondents that the interviewer/researcher knows or expects that there were such occurrences.

A concrete example provided in the *Reference Guide on Survey Research* nicely addresses and supports my concern:

“To test consumer impressions, a survey might have shown the commercial and asked an open-ended question: “How many different brands mentioned in the commercial did each of the 900 women try?” Instead, the survey asked a closed-ended question; respondents were given the choice of “one,” “two,” “three,” “four,” or “five or more. The fact that four of the five choices in the closed-ended question provided a response that was greater than one implied that the correct answer was probably more than one.” (page 252)

Moreover, respondents often presume that the “normal” or “typical” person falls near the middle of a response scale rather than at the extremes (see Schwarz and Hippler, “What Response Scales May Tell Your Respondents: Informative Functions Of Response Alternatives” in Hippler, Schwarz and Sudman, pp. 163-178, cited above). This flawed approach to question design gives respondents to this survey even more reason to avoid a lone and extreme “none” response.

Accordingly, for all the reasons I have discussed, the procedure used for these key survey questions produces an unacceptable directional bias. This strong bias is present for questions 24, 25, and 26, identified above. Hence, these data are unreliable and should not be used for policy decisions.

REVISITING “BILL SHOCK” BY WAY OF “UNEXPECTED” CHARGES?

I briefly alluded to a 2010 survey relied on by the FCC to demonstrate “bill shock” despite the fact that the survey never asked whether people were shocked or surprised by their bills. Here, in the November 2009 E-supplement to the GAO Report, the earlier 2009 survey has asked a question (question 26, discussed above) to determine the frequency of “charges related to your wireless phone service that you did not expect?” This question, however, is not a satisfactory way to estimate consumers’ shock or surprise.

In addition to the already discussed reasons to question the validity of these data, there are a few additional points to be made. Consumers receive bills almost every day (when they go shopping in supermarkets, eat in restaurants, receive monthly bills in the mail, etc.). It is a common occurrence, for example, for supermarket bills to be higher than expected. People choose to make unplanned purchases (perhaps in response to in-store reminder cues that a product is running low or special offers) and then fail to keep an accurate count of what they have spent. So, if consumers were asked how often there were expenses on supermarket bills they did not expect, a great many would almost certainly report a reasonable number of occurrences.

Most such consumers would also acknowledge that they freely made the choices that led to charges they simply failed to keep track of. People often go to restaurants and, based on the menu, expect the dinner to cost a certain amount. But they also frequently fail to keep track of the “little extras” (an added salad or beverage) that makes the final bill “unexpectedly” higher. Once again these are freely made choices and the costs are not hidden. Nevertheless, it may

almost be termed “human nature” to start with expectations that, based on years of experience, people know will not be met—because of the choices they know they make.

There are many choices consumers make that can lead their wireless phone bills to be higher than their original expectations. For example, consumers (or their children) may download a song that they heard on the radio that day or stream the YouTube video that a friend sent them. And other circumstances can lead to higher than expected wireless phone bills. For example, consumers may not have accounted for taxes and fees in their original expectations. The survey failed to ask any follow-up questions to try to identify whether most people who reported “unexpected charges” were intending to refer to these freely chosen expense items or mandated taxes and fees or, instead, to something “not expectable.” By that I mean something a consumer behaving in a reasonable manner should not expect or be able to control and keep track of. However, consumers who, on their own volition, go over their monthly allowances should fully expect to be charged for those overages, just as supermarket shoppers rightfully expect to pay for unanticipated extra items or larger quantities purchased.

Because of the lack of follow-up questions, there is simply no way to know what consumers were referring to if they reported unexpected charges or even the dollar amount of them.

SURVEY SHOWS CARRIERS ARE ADEQUATELY RESPONDING TO CUSTOMER BILLING CONCERNS

Finally, the GAO Report states on page 11:

“[A]lmost one-third of wireless users who contacted customer service about a problem did so because of problems related to billing.”

The “almost one-third” reference presumably refers to the data from question 28d:

“Thinking about the most recent time you contacted your wireless phone service provider to resolve a problem, please describe the problem you were trying to resolve.:
Billing”

The responses to this question reveal that 30 percent of participants identified billing as the reason for their call. But we don’t know—because of the absence of follow-up questions—whether the call might have been for any number of reasons, rather than unexpected charges or inability to understand the bill. For example, participants could have been calling with a question about their local taxes or a service promotion.

We do know (from question 29) that only 21 percent reported being dissatisfied with their wireless service provider’s attempt to resolve the problem. If that percentage is applied to the 30 percent who reportedly made such calls about something to do with their bills, we are left with only around 6 percent who did not have such a problem resolved satisfactorily. Because of the lack of follow-up questions, we do not know anything about the nature of the reported problems that apparently could not be resolved to the consumer’s satisfaction. Needless to say,

not all cases of consumer dissatisfaction can be resolved. For example, complaints regarding the amount of taxes charged cannot be resolved by taking the taxes off the bill. Therefore, even this 6 percent has to be an overestimate of the magnitude of the resolvable dissatisfaction.

We have some further information that seems relevant to the issue of consumer satisfaction. When people were asked the appropriately balanced question 15: “How satisfied or dissatisfied are you with the accuracy and clarity of the billing or charges for your wireless phone service?” only 12 percent reported being somewhat or very dissatisfied. When people were asked the similar question 18: “How satisfied or dissatisfied are you with how well the key aspects of your service plan were explained orally or in writing when you signed up for it?” Only 10 percent reported being somewhat or very dissatisfied.

Based on the responses to these appropriately balanced questions and question 29, it appears that consumers are overall satisfied with their wireless service and that carriers are responding to customers’ billing concerns when they are not satisfied.