

# In The Wake of Ashley Madison

information security lessons (hopefully) learned

Jim Salter

Mercenary Sysadmin,  
Small Business Owner



Today's slides can be found at:

<http://openoid.net/presentations/>

# The promise of Ashley Madison

Members Login ▾

# ASHLEY MADISON®

Life is short. Have an affair.®

Get started by telling us your relationship status:

Please Select ▾

See Your Matches »

Over **40,555,000** anonymous members!



**As seen on:** Hannity, Howard Stern, TIME, BusinessWeek, Sports Illustrated, Maxim, USA Today

Ashley Madison is the world's leading married dating service for **discreet** encounters



Trusted Security Award



SSL Secure Site

[Register on Ashley Madison](#) [Affiliate Program](#) [Press](#) [FAQ](#) [Guarantee](#) [Blog](#) [Infidelity News](#) [Articles](#) [Terms](#) [Privacy](#) [Contact Us](#)

Follow Ashley Madison on: [Twitter](#) [Facebook](#) [Youtube](#)

# The *reality* of Ashley Madison

Members Login ▾

# ASHLEY MADISON<sup>®</sup>

Life is short. Have an affair.<sup>®</sup>

Get started by telling us your relationship status:

Please Select ▾

[See Your Matches »](#)

Over **40,555,000** anonymous members!



**As seen on:** Hannity, Howard Stern, TIME, BusinessWeek, Sports Illustrated, Maxim, USA Today

Ashley Madison is the world's leading married dating service for *discreet* encounters



Trusted Security Award



SSL Secure Site

[Register on Ashley Madison](#) [Affiliate Program](#) [Press](#) [FAQ](#) [Guarantee](#) [Blog](#) [Infidelity News](#) [Articles](#) [Terms](#) [Privacy](#) [Contact Us](#)

Follow Ashley Madison on: [Twitter](#) [Facebook](#) [Youtube](#)

# This talk is not about ethics in adultery.

*(or in video game journalism)*

Members Login

## ASHLEY MADISON®

Life is short. Have an affair.®

Get started by telling us your relationship status:

Please Select

See Your Matches »

Over **40,585,000** anonymous members!

★★★★  
100%  
Like-minded  
People

As seen on: Hannity, Howard Stern, TIME, BusinessWeek, Sports Illustrated, Maxim, USA Today

Ashley Madison is the world's leading married dating service for **discreet** encounters

Trusted Security Award

100% **discreet** service

SSL Secure Site

Register on Ashley Madison | Affiliate Program | Press | FAQ | Guarantee | Blog | Infidelity News | Articles | Terms | Privacy | Contact Us

Follow Ashley Madison on: [Twitter](#) | [Facebook](#) | [Youtube](#)

# I will never knowingly “out” anyone.

Members Login ▾

## ASHLEY MADISON®

Life is short. Have an affair.®

Get started by telling us your relationship status:

Please Select ▾

See Your Matches »

Over **40,585,000** anonymous members!

★★★★  
100%  
Like-minded  
People

As seen on: Hannity, Howard Stern, TIME, BusinessWeek, Sports Illustrated, Maxim, USA Today

Ashley Madison is the world's leading married dating service for *discreet* encounters

Trusted Security Award

100% *discreet* service

SSL Secure Site

Register on Ashley Madison | Affiliate Program | Press | FAQ | Guarantee | Blog | Infidelity News | Articles | Terms | Privacy | Contact Us

Follow Ashley Madison on: [Twitter](#) | [Facebook](#) | [Youtube](#)

# How'd I get involved?



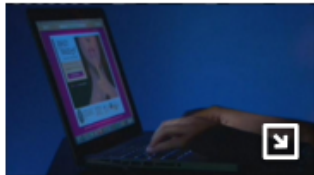
**WIS 10 NEWS** LIVE. LOCAL. NOW.  
Download  
The LOCAL News App  
TEXT APP TO 80310  
MESSAGE & DATA RATES MAY APPLY

NEWS WEATHER SPORTS VIDEO TRAFFIC INVESTIGATES

## Ashley Madison hack reminder that data is never 100 percent secure

Posted: Aug 21, 2015 9:33 PM EDT  
Updated: Aug 31, 2015 9:33 PM EDT

By Jack Kuenzie [CONNECT](#)



COLUMBIA, SC (WIS) - This week's release of data collected by the Canadian company catering to cheaters is another reminder for all of us who put our personal information online.

That reminder is you will never be 100 percent safe.

For Ashley Madison's 39 million users, privacy was paramount.

And the company apparently convinced many, if not most, their interests and most sensitive personal information would be safe.

"I just want to know very simply, is my data secure?" said IT expert Jim Salter. "Do I ever have to worry about this? The answer is no, it is not secure. Yes, you need to worry about it."

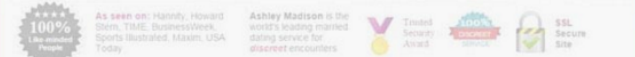
## What are the SC towns and cities with the most paid activity on Ashley Madison?

Posted: Aug 27, 2015 11:39 AM EDT  
Updated: Sep 06, 2015 11:39 AM EDT

By Jeremy Turnage [CONNECT](#)

START SHARE 2/18

ASHLEY MADISON®  
Life is short. Have an affair.®  
WIS and a local cybersecurity analyst broke down the alleged data from the massive hack on Ashley Madison, the website that facilitates cheating for wayward spouses.




Register on Ashley Madison Affiliate Program Press FAQ Guarantee Blog Infidelity News Articles Terms Privacy Contact Us  
Follow Ashley Madison on: [Twitter](#) [Facebook](#) [Youtube](#)

# SC / GA citizens spent > \$9.96M on Ashley Madison, 2008-2015.

US top spender: >\$130K  
GA top spender: > \$30K  
SC top spender: > \$11K

1,127 SC/GA citizens  
spent >= \$1K !



The screenshot shows the Ashley Madison website interface. At the top right, there is a "Members Login" link. The main header features the "ASHLEY MADISON" logo with the tagline "Life is short. Have an affair.®". Below the logo, a form prompts users to "Get started by telling us your relationship status:" with a "Please Select" dropdown menu and a "See Your Matches »" button. A banner below the form states "Over 40,585,000 anonymous members!". The bottom section of the page includes a "100% Like-minded People" badge, a list of media mentions ("As seen on: Hannity, Howard Stern, TIME, BusinessWeek, Sports Illustrated, Maxim, USA Today"), a "Trusted Security Award" badge, a "100% discreet service" badge, and an "SSL Secure Site" badge. The footer contains navigation links for "Register on Ashley Madison", "Affiliate Program", "Press", "FAQ", "Guarantee", "Blog", "Infidelity News", "Articles", "Terms", "Privacy", and "Contact Us", along with social media links for "Twitter", "Facebook", and "Youtube".

13,038 SC / 30,647 GA  
citizens spent money  
on Ashley Madison.

That's about 3 out of every  
thousand people in either  
state.

A screenshot of the Ashley Madison website interface. The top right corner has a "Members Login" link. The main header features the "ASHLEY MADISON" logo with the tagline "Life is short. Have an affair.®". Below the logo is a form titled "Get started by telling us your relationship status:" with a "Please Select" dropdown menu and a "See Your Matches »" button. A banner below the form states "Over 40,555,000 anonymous members!". The background of the page shows a woman shouting into a megaphone. At the bottom, there are several trust and security badges: a "100% Like-minded People" badge, a "As seen on" list including Hannity, Howard Stern, TIME, BusinessWeek, Sports Illustrated, Maxim, and USA Today; a "Trusted Security Award" badge; a "100% discreet service" badge; and an "SSL Secure Site" badge. The footer contains a navigation menu with links for Register, Affiliate Program, Press, FAQ, Guarantee, Blog, Infidelity News, Articles, Terms, Privacy, and Contact Us, along with social media links for Twitter, Facebook, and Youtube.



# About 92.5% of them were men.

That's about 5.1 out of every  
thousand men in SC or GA.

The screenshot shows the Ashley Madison website interface. At the top right, there is a "Members Login" link. The main header features the "ASHLEY MADISON" logo with the tagline "Life is short. Have an affair." Below this, a form prompts users to "Get started by telling us your relationship status:" with a "Please Select" dropdown menu and a "See Your Matches »" button. A banner below the form states "Over 40,585,000 anonymous members!". The bottom section includes a "100% Like-minded People" badge, a list of media mentions ("As seen on: Hannity, Howard Stern, TIME, BusinessWeek, Sports Illustrated, Maxim, USA Today"), a "Trusted Security Award" badge, a "100% discreet service" badge, and an "SSL Secure Site" badge. The footer contains navigation links for "Register on Ashley Madison", "Affiliate Program", "Press", "FAQ", "Guarantee", "Blog", "Infidelity News", "Articles", "Terms", "Privacy", and "Contact Us", along with social media links for "Twitter", "Facebook", and "Youtube".

# About 75% of them were men age 25-55.

That's about 1.1 out of every  
*hundred* men in SC or GA,  
age 25-55.

The screenshot shows the Ashley Madison website interface. At the top right, there is a "Members Login" link. The main header features the "ASHLEY MADISON" logo with the tagline "Life is short. Have an affair.®". Below the logo, a form prompts users to "Get started by telling us your relationship status:" with a "Please Select" dropdown menu and a "See Your Matches »" button. A banner below the form states "Over 40,585,000 anonymous members!". The bottom section includes a "100% Like-minded People" badge, a list of media mentions ("As seen on: Hannity, Howard Stern, TIME, BusinessWeek, Sports Illustrated, Maxim, USA Today"), a "Trusted Security Award" badge, a "100% discreet service" badge, and an "SSL Secure Site" badge. The footer contains navigation links for "Register on Ashley Madison", "Affiliate Program", "Press", "FAQ", "Guarantee", "Blog", "Infidelity News", "Articles", "Terms", "Privacy", and "Contact Us", along with social media links for "Twitter", "Facebook", and "Youtube".

# It's worse in cities.

%males 25-55 paid, SC/GA cities >80k pop:

(city population data taken from <http://www.suburbanstats.org>)

Roswell GA: 3.3%

Atlanta GA: 2.4%

Columbia SC: 2.2%

Charleston SC: 1.8%

Augusta GA: 1.8%

Athens GA: 0.8%

N. Charleston SC: 0.5%

Members Login

**ASHLEY MADISON®**  
Life is short. Have an affair.®

Get started by telling us your relationship status:

Please Select

See Your Matches »

Over **40,585,000** anonymous members!

★★★★  
100% Like-minded People

As seen on: Hannity, Howard Stern, TIME, BusinessWeek, Sports Illustrated, Maxim, USA Today

Ashley Madison is the world's leading married dating service for *discreet* encounters

Trusted Security Award

100% *discreet* service

SSL Secure Site

Register on Ashley Madison | Affiliate Program | Press | FAQ | Guarantee | Blog | Infidelity News | Articles | Terms | Privacy | Contact Us

Follow Ashley Madison on: [Twitter](#) | [Facebook](#) | [Youtube](#)

# “Bedroom” communities?

%males 25-55 paid, SC/GA towns >10k pop:

(city population data taken from <http://www.suburbanstats.org>)

Buford GA: 14.8%

Suwanee GA: 13.4%

Marietta GA: 11.5%

Lawrenceville GA: 11.5%

Fort Mill SC: 10.2%

Woodstock GA: 10.0%

Acworth GA: 9.8%

Loganville GA: 9.7%

Alpharetta GA: 9.7%

Canton GA: 8.9%

Members Login

**ASHLEY MADISON**<sup>®</sup>  
Life is short. Have an affair.<sup>®</sup>

Get started by telling us your relationship status:

Please Select

See Your Matches »

Over **40,585,000** anonymous members!

100% Like-minded People

As seen on: Hannity, Howard Stern, TIME, BusinessWeek, Sports Illustrated, Maxim, USA Today

Ashley Madison is the world's leading married dating service for discreet encounters

Trusted Security Award

100% discreet service

SSL Secure Site

Register on Ashley Madison | Affiliate Program | Press | FAQ | Guarantee | Blog | Infidelity News | Articles | Terms | Privacy | Contact Us

Follow Ashley Madison on: [Twitter](#) | [Facebook](#) | [Youtube](#)

# I am **NOT** making this up.

File under “hilarious anomaly”.

This would imply 62.3% of males 25-55...

me@locutus:~/amdumps/work\$ perl bypop.pl CUMMING


PERCAP, CITY, MEMBERS, POPULATION  
**17.3%, CUMMING, 938, 5430**

The screenshot shows the Ashley Madison website. At the top right, there is a "Members Login" link. The main header features the "ASHLEY MADISON" logo with the tagline "Life is short. Have an affair." Below this, a form prompts the user to "Get started by telling us your relationship status:" with a dropdown menu set to "Please Select" and a "See Your Matches »" button. A banner below the form states "Over 40,585,000 anonymous members!". The bottom section includes a "100% Like-minded People" badge, a list of media mentions ("As seen on: Hannity, Howard Stern, TIME, BusinessWeek, Sports Illustrated, Maxim, USA Today"), a "Trusted Security Award" badge, a "100% discreet service" badge, and an "SSL Secure Site" badge. The footer contains navigation links for "Register on Ashley Madison", "Affiliate Program", "Press", "FAQ", "Guarantee", "Blog", "Infidelity News", "Articles", "Terms", "Privacy", and "Contact Us", along with social media links for "Twitter", "Facebook", and "Youtube".



# What made the Ashley Madison breach special?

**RISK.**



Members Login

## ASHLEY MADISON®

Life is short. Have an affair.®

Get started by telling us your relationship status:

Please Select

[See Your Matches »](#)

Over **40,585,000** anonymous members!

★★★★  
100% Like-minded People

As seen on: Hannity, Howard Stern, TIME, BusinessWeek, Sports Illustrated, Maxim, USA Today

Ashley Madison is the world's leading married dating service for discreet encounters

Trusted Security Award

100% discreet service

SSL Secure Site

Register on Ashley Madison | Affiliate Program | Press | FAQ | Guarantee | Blog | Infidelity News | Articles | Terms | Privacy | Contact Us

Follow Ashley Madison on: [Twitter](#) | [Facebook](#) | [Youtube](#)

# Speaking of “risk”: let’s talk about netblocks.

## Army Research Office

NetRange: 132.193.0.0 - 132.193.255.255  
CIDR: 132.193.0.0/16  
NetName: ARO-NET  
NetHandle: NET-132-193-0-0-1  
Parent: NET132 (NET-132-0-0-0-0)  
NetType: Direct Assignment



The screenshot shows the Ashley Madison website interface. At the top right, there is a "Members Login" link. The main header features the "ASHLEY MADISON" logo with the tagline "Life is short. Have an affair.®". Below the logo, a form prompts the user to "Get started by telling us your relationship status:" with a "Please Select" dropdown menu and a "See Your Matches »" button. A banner below the form states "Over 40,585,000 anonymous members!". The bottom section of the page includes several trust and security badges: a "100% Like-minded People" badge, a "As seen on: Hannity, Howard Stern, TIME, BusinessWeek, Sports Illustrated, Maxim, USA Today" badge, an "Ashley Madison is the world's leading married dating service for discreet encounters" badge, a "Trusted Security Award" badge, a "100% discreet service" badge, and an "SSL Secure Site" badge. The footer contains navigation links for "Register on Ashley Madison", "Affiliate Program", "Press", "FAQ", "Guarantee", "Blog", "Infidelity News", "Articles", "Terms", "Privacy", and "Contact Us", along with social media links for "Twitter", "Facebook", and "Youtube".



# Today's vocabulary word:

pivot

The screenshot shows the Ashley Madison website interface. At the top right, there is a "Members Login" link. The main header features the "ASHLEY MADISON" logo with the tagline "Life is short. Have an affair." Below this, a form prompts users to "Get started by telling us your relationship status:" with a "Please Select" dropdown menu and a "See Your Matches »" button. A banner below the form states "Over 40,585,000 anonymous members!". The bottom section contains several trust and media-related icons: a "100% Like-minded People" badge, a list of media outlets ("As seen on: Hannity, Howard Stern, TIME, BusinessWeek, Sports Illustrated, Maxim, USA Today"), a "Trusted Security Award" logo, a "100% discreet service" badge, and an "SSL Secure Site" icon. The footer includes a navigation menu with links for "Register on Ashley Madison", "Affiliate Program", "Press", "FAQ", "Guarantee", "Blog", "Infidelity News", "Articles", "Terms", "Privacy", and "Contact Us". It also includes social media links for "Twitter", "Facebook", and "Youtube".

# In a nutshell:

all sites will fall

think about exposure

where can the  
attacker go *next?*

Members Login

## ASHLEY MADISON®

Life is short. Have an affair.®

Get started by telling us your relationship status:

Please Select

See Your Matches »

Over **40,585,000** anonymous members!

100% Like-minded People

As seen on: Hannity, Howard Stern, TIME, BusinessWeek, Sports Illustrated, Maxim, USA Today

Ashley Madison is the world's leading married dating service for *discreet* encounters

Trusted Security Award

100% *discreet* service

SSL Secure Site

Register on Ashley Madison | Affiliate Program | Press | FAQ | Guarantee | Blog | Infidelity News | Articles | Terms | Privacy | Contact Us

Follow Ashley Madison on: [Twitter](#) | [Facebook](#) | [Youtube](#)

# Questions?

## Comments?

Angry denunciations?



OPENAI