



PENNSYLVANIA CHILD SUPPORT ENFORCEMENT SYSTEM (PACSES)  
MOBILE CHILD SUPPORT WEBSITE (CSWS)

DEPARTMENT OF HUMAN SERVICES  
COMMONWEALTH OF PENNSYLVANIA

Nominating Category  
DIGITAL GOVERNMENT: GOVERNMENT-TO-CITIZEN

Nominator  
Sandra Patterson  
Chief Information Officer  
Department of Human Services

Project Initiation and Completion Dates  
June, 2014 – May, 2015



## **Executive Summary**

### **Business Problem and Solution Description**

The Pennsylvania Child Support Website (CSWS), maintained by the Department of Human Services (DHS) Bureau of Child Support Enforcement (BCSE) and the Bureau of Information Systems (BIS), offers general information to public users inquiring about the Commonwealth child support program. In addition, case members currently paying and receiving child support have the ability to register on the CSWS to access self-service features such as viewing general case and payment information and the ability to update demographic and case information. First implemented in 2007, the CSWS was originally designed to be viewed via a desktop computer and was not optimized for the smaller displays of mobile devices.

Smartphones and other mobile devices are increasingly becoming the preferred means for accessing online content; it was estimated that over 67% of Pennsylvania child support case members could access the CSWS via a mobile device. In order to reach a larger number of individuals, provide enhanced customer service, and increase the usage of self-service functionality, a mobile version of the CSWS was created. The mobile CSWS is optimized for smartphone devices and allows members to more easily access and update case information while on the go; this in turn results in better case outcomes and reduced case worker inquiries. By providing a mobile option that is tailored to the needs and preferences of users, BCSE is better able to engage members and exceed federally mandated performance measures. Pennsylvania continues to lead the nation in child support enforcement outcomes due in large part to its ability to use technological innovation to better serve case members and obtain organizational objectives.

### **Significance**

Through the implementation of the mobile CSWS, a larger number of child support case members can be better served. In comparing the average daily logins for the desktop CSWS immediately prior to the mobile implementation in May, 2015, to the average daily logins of the combined desktop and mobile sites between June, 2015 and February, 2016, overall usage of the combined websites has increased by more than 17%. In addition to increased usage, the number of mobile logins as of February, 2016, accounted for more than 52% of all CSWS logins. This further exemplifies the value that the mobile version of the site offers case members, as it now represents the preferred version of the site. Since the implementation of the mobile CSWS over 19,000 demographic updates via the mobile site have been made, representing over 36% of all self-service updates. In addition, over 2,850 employer tips have been submitted through the mobile site, representing over 34% of all employer tips during the period. As a result of the increasing preference for mobile, it is expected that these numbers will continue to grow exponentially. In addition to the direct benefits offered to case members, the mobile site has also resulted in a more efficient use of case worker time by providing a 17% decrease in the number of general inquiry calls received by child support county offices in the past six months.



**Project Narrative: Concept**

The adoption and use of mobile internet devices has been rapidly increasing, even among lower-income demographic groups. In many cases, the mobile device is the primary means of accessing the internet for those users. The variety of devices on the market as well as the corresponding functional capabilities that they provide has also been on the rise for a number of years. Ignoring the mobile audience is no longer an option when dealing with a large population of public users.

At the onset of this PACSES Mobile CSWS initiative, more than 67% of child support case members – representing over 500,000 custodial and non-custodial parents – were able to access the CSWS via a mobile device. The desktop version of the Pennsylvania Child Support Website (CSWS) was very difficult to navigate via a mobile device,

requiring significant scrolling and zooming actions and leaving a large number of case members unable to easily view and access the self-service features of the CSWS. This in turn increased the number of inquiries and other routine case actions – like demographics changes – that had to be handled directly by case workers.



The mobile CSWS was implemented in order to provide enhanced customer service, convenience, and information accessibility to the general public and child support case members, and to increase the usage of the CSWS self-service features. Through the implementation of the mobile CSWS, a larger number of members are better able to leverage the capabilities of the CSWS, which in turn helps to make members more proactive and engaged, reduces case worker workload for routine case actions, and ultimately results in better case outcomes.

**Solution**

The features and capabilities of the existing desktop version of the CSWS were extended for use by the mobile version of the site. When the CSWS is accessed by a public user, the system determines the type of device being used and takes the user to



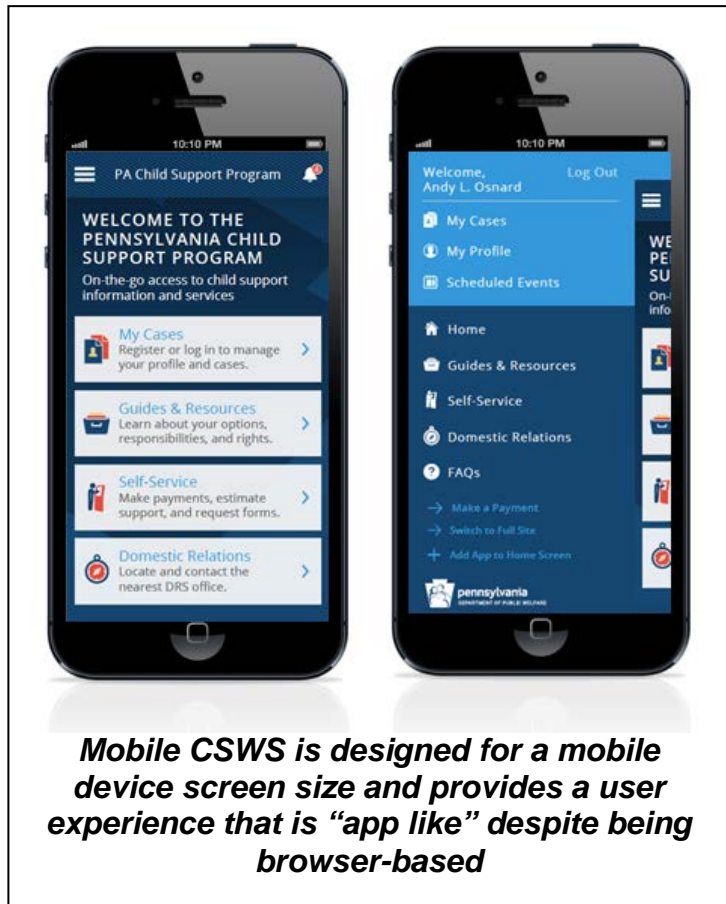
the appropriate version of the website, desktop or mobile. Registered users can log into either version of the site, depending upon the device used, with the same set of credentials. The mobile CSWS is specifically designed for a mobile form factor (screen size) separate from the desktop site. The most commonly used services and the most valued self-service options offered to users via the desktop CSWS are also provided by the mobile CSWS. The mobile site also offers additional, device specific features such as GPS location information and map integration, as well as calendar integration for upcoming scheduled events. Individuals are able to easily access the mobile site by navigating to the CSWS via a browser on any mobile device. Users are also provided with the ability to save the mobile CSWS link to their phone home screen, which allows the site to operate similar to other mobile apps.

The mobile CSWS leverages the existing web technologies for the desktop CSWS, including Microsoft .NET and a back-end Oracle database. An innovative user-centric design approach was employed in order to tailor the mobile solution more specifically to the needs of Pennsylvania child support members. User research, the development of user “personas” and roles (i.e., profiles of prospective users that include characteristics that may impact the design), along with use cases and storyboards helped create a product that was targeted to meet the diverse needs of different users. Usability metrics were analyzed to see which features

were most in demand by users, and technical details were developed through the use of information architecture design, wireframing (user interface design without colors or visual details yet applied), and visual design prototyping allowing for the creation of a mobile solution that was technically feasible, visually appealing, and user-centric. All of these design techniques were new to the BCSE child support stakeholders and were successfully utilized to create an extremely user-centric design.

### **Implementation**

Requirements and design of the PACSES Mobile CSWS began in June, 2014. It was implemented and made available to public users on Saturday, May 30<sup>th</sup>, 2015.

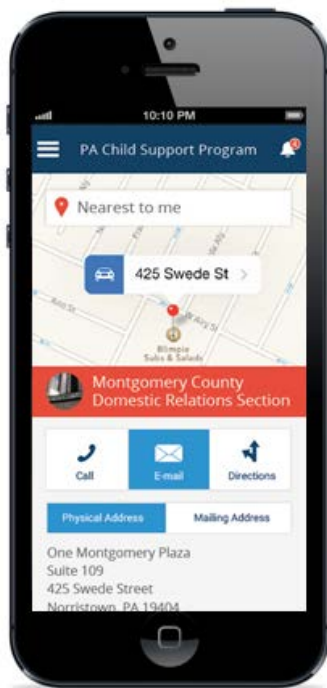




Development time was approximately 14,000 person-hours over this period, with a total cost of approximately \$1.6M. Both development time and cost were less than initially estimated.

Given that potentially 67% of traffic accessing the desktop version of CSWS was coming from mobile devices, combined with the fact that users are automatically directed to the mobile site based upon the type of device they are using, BCSE opted to do limited marketing for the mobile website itself. It was anticipated that users would “discover” and access the mobile website on their own simply through normal interaction and based on the device used. However, notifications concerning the availability of the mobile CSWS were provided by county Domestic Relations Section (DRS) offices across the Commonwealth during normal case management activities, as well as the mobile site being directly announced on the desktop CSWS itself. A “banner message” visible to all users was displayed on the home screen of the CSWS introducing the new web version when it was first implemented. In addition, links are provided between the desktop and mobile sites.

## Significance



***Advanced features that utilize the capabilities of the mobile device are also provided, such as GPS location***

The primary goal of the PACSES Mobile CSWS is to provide enhanced convenience and accessibility to self-service functionality for case members attempting to access the CSWS via a mobile device. The mobile CSWS is not device specific (i.e., it is not limited to only iOS or Android phone users) and allows users on smartphones and tablets to easily view the site, access case information, and make updates via the self-service options provided. Case members are able to directly access the mobile CSWS site via a mobile browser, and no additional downloads or installations are required. Via the mobile CSWS registered case members are able to view:

- Case summary details
- Payment information
- Court docket information
- Case events (hearings, DRS appointments)
- Case details
- Account balances

Members can also view and make updates to their demographic information, including address, phone numbers, communication preferences, and





employment status. Additional self-service options allow members to find out how to make child support payments, request an acknowledgement of paternity, estimate their monthly child support payment amount, and access online support services. The mobile CSWS is secured using the same security mechanisms as the desktop CSWS, so the same user credentials can be used for both sites and the same level of protection of personal information is provided regardless of the site being used. Logged-in users are alerted when they or their case meet certain critical criteria including:

- That a bench warrant has been issued
- Early payment reminders for recently established or modified cases
- Upcoming scheduled events
- Missed payment reminders
- Missing demographic information.

Finally, advanced features that utilize the capabilities of the mobile device are also provided – obtaining a map to the closest county office based on the user’s current location, and the ability to add scheduled case events directly to the calendar on the device.

Benefits of the mobile CSWS are realized by three groups of users: public users, case members, and child support case workers. Public users who access the mobile website have access to an abundant amount of information and self-service options, including but not limited to services such as how to apply for child support and tools for estimating potential child support payments. Pennsylvania child support case members registered for the CSWS directly benefit from the mobile solution, which provides enhanced convenience and accessibility when accessing and utilizing the self-service features of the CSWS via a mobile device. The mobile solution allows case members to easily access critical case information, make updates, receive reminders, and take proactive steps in managing their case(s). In addition to benefiting case members, the new solution also helps county DRS case workers by reducing the number of general inquiry and routine update calls received by county offices, as members are able to more easily access information and make updates through the mobile solution.

The mobile CSWS helps to facilitate significant collaboration between county DRS case workers, custodial parents, non-custodial parents, and/or their attorneys. By entering their own case information through the self-service options provided by the mobile CSWS, the requester is able to enter and directly verify their case and demographic information, helping to increase the accuracy of that data. Though this particular capability was built primarily for the consumption of the Pennsylvania child support constituents, significant collaboration between systems supporting child support enforcement and case management activities occurs in the background. For example, once an individual updates information via the mobile CSWS, the information is made available and is visible through the internal Pennsylvania Child Support Enforcement System (PACSES) applications.



## Impact

At the onset of the mobile CSWS initiative, it was estimated that 67% of Pennsylvania child support case members had the ability to access the CSWS via a mobile device, representing a majority of the case member population. In addition, this estimate did not take into account the large number of individuals in the general public who also have the ability to access the CSWS via mobile devices. As of February 2016, the case member population has **logged into the mobile CSWS over 1.3 million times**. In comparing the average daily logins for the desktop CSWS immediately prior to the mobile implementation in May, 2015, to the average daily logins of the combined desktop and mobile sites between June 2015 and February 2016, **overall usage of the combined websites has increased by more than 17%**. In addition to providing an overall increase in the number of individuals accessing the services provided by the CSWS, the number of daily **CSWS mobile logins** as of February 2016 **accounted for 52% of all logins**, an indication of the prevalence of mobile users of the site. Since the mobile implementation **over 19,000 demographic updates** via the mobile CSWS have been made, representing 36% of all self-service updates in that timeframe. Also over **2,850 employer tips have been submitted** via the mobile site, representing 34% of all employer tips during the period. An increasing number of case members, over 11,000 as of February, have registered for the CSWS via the mobile site. As result of the increasing preference for mobile, it is expected that these numbers will continue to increase.

Through the implementation of the mobile CSWS, a larger number of child support case members can be engaged and served. It has resulted in a significant increase in the number of individuals accessing the self-service and data viewing features of the CSWS. In addition to the direct benefits offered to case members, the mobile site has also resulted in a more efficient use of worker time by providing a **17% decrease in the number of general inquiry calls received by child support county offices** in the past six months. While only just now completing its first year of service, the PACSES Mobile CSWS has already met many of the goals that BCSE established when starting this initiative:

- Providing the accessibility and availability of the CSWS to a larger number of case members – in particular those who use a mobile device as their primary means of accessing the Internet
- Increase customer service and satisfaction
- Increase the ability for members to play a more proactive role in case management, rather than being passive recipients
- Improve the flow of information between DRS workers and case members
- Provide better communication and outcomes for a case