Modernizing Digital Payments

State: Commonwealth of Pennsylvania
Agency: Commonwealth Office of Digital Experience
Award Category: Operational Efficiency
Project Dates: March 2025 to July 2026
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PA
Commonwealth of Pennsylvania

Executive Summary

The Commonwealth of Pennsylvania (COPA) developed the Enterprise Payments Platform (EPP) to address longstanding challenges with digital payments.

The EPP provides a standard payment experience with COPA branding that routes constituents and businesses through the same basic process while allowing for agency-specific messaging. Enterprise IT supports all vendor changes and regularly updates EPP to stay secure, up-to-date, and integrated effectively with the COPA payment vendor's pages. The new platform also provides agencies with an on ramp to start collecting payments electronically via quick payment links they can generate and publish themselves. The EPP improves IT visibility into performance and identifying issues, while new dashboards and reporting capabilities provide agencies and fiscal staff in the Office of the Budget (OB) with a centralized space to review payments, process refunds and voids, and download reports as needed.

Using Agile methodology, the EPP team of technical, product, and project subject matter experts developed and deployed four applications comprising the EPP product suite. Discovery and requirements sessions informed the product roadmap, product release schedule, and sprints. Nearly 100 applications are being migrated to EPP and a new payment page to meet a June 1, 2026, deadline.

Idea

The Enterprise Payments Platform (EPP) offers a solution to a set of challenges the Commonwealth of Pennsylvania (COPA) experienced with electronic payments.

Fragmented user experience

Prior to EPP, agencies directly integrated applications that accepted digital payments with the COPA payment vendor, so the only common thread of experience for constituents and businesses was the vendor's payment page.

Decentralized integration

There were nearly 100 agency applications integrated with a payment page directly. This often resulted in inconsistencies for these integrations. Further, Enterprise IT could not easily support these varied apps and in many cases did not have a point of contact. Agency applications did not receive alerts or updates about payment transactions or any associated issues. As a result, hours could go by before an agency was informed, often by a user, that a payment had failed or that the payment page was operating intermittently.

Barriers to entry for new payment streams

There was no central service or application that agencies could utilize to start accepting digital payments. Faced with procuring or building their own application, many chose to continue collecting payments via paper check or money order instead.

Inefficient maintenance and support

The COPA payment vendor regularly makes updates or changes to its payment page. Decentralized integration required agencies to dedicate dozens to hundreds of hours in developer time to update their applications to account for or incorporate these changes. Likewise, agencies largely had to manage migrating their applications when the vendor retired a payment page. This required learning about the change in a timely manner and appropriate testing by all app support teams in agencies. No central or shared test environment existed, forcing agencies to test changes on their own and using individual purchasing cards managed by the Office of Budget (OB). Findings could not be centrally tracked, and thus no coordinated response occurred to resolve issues found with the vendor's system. Instead, agencies had to contact the payment vendor directly, overwhelming its help desk and causing long waiting times and delayed resolution.

Agencies also processed refunds largely independently using manual processes prone to mistakes or delays in issuing payments.

The need to address these longstanding challenges came to a head when the COPA payment vendor announced plans to sunset its main payment page. Agencies needed to migrate their applications to a new page in approximately six weeks and be prepared to migrate again within the next two years when this page was also retired.

EPP serves as a model for electronic payments collection and digital transformation by insulating agencies and their applications from payment vendor issues or time-intensive changes, offering new ways to collect payments digitally, and providing autonomy and configurability. At the same time, constituents and businesses are benefiting from a standard, reliable, and streamlined experience.

Implementation

Discovery and requirements

The EPP project began with an extensive discovery phase with multiple sessions across agencies to meet directly with all personnel involved in processing payments. These conversations provided critical insights into existing workflows, system gaps, and opportunities for process improvement.

From the discovery findings, the EPP team identified four core functional groupings as key areas required for an enterprise-wide, unified solution. The team refined the groupings into four applications that comprise the EPP solution:

- **EPP Core:** the main application for agency applications already accepting payments to integrate with
- **EPP Admin:** a web app to administer application configurations with EPP and review payments
- **EPP Quick Pay**: a web app that agencies use to generate payment links for application, permit, licensing, or renewal fees

- **EPP Invoice Pay:** for constituents and businesses to look up and then pay an invoice sent to them by COPA

Quick Pay and Invoice Pay are especially useful in cases where agencies are still receiving payments by checks and money orders through the mail.

The forthcoming migration of agency applications to the vendor's new payment page offered a unique opportunity to integrate with EPP during the migration. The team prioritized the product roadmap to release features and functionality based on agency needs and any changes required to support integration with the new payment page.

The project team developed a clear, phased implementation roadmap to minimize disruption and allow agencies to transition in a structured and manageable way. Agencies self-selected their applications into one of three waves based on priority, business case, and any application-specific work needed prior to integration.

- Wave 1 (Pilot): October 1, 2025 to June 1, 2026 – Initial implementation with the first pilot group to validate functionality and refine processes.
    - 22 total applications across 10 agencies
- Wave 2: January 1 to June 1, 2026 – Expansion to the next set of agencies and functional areas based on insights from the pilot.
    - 24 applications across 8 agencies
- Wave 3: March 1, to June 1, 2026 – Final transition wave, completing the rollout across remaining agencies.
    - 45 applications across 15 agencies

Product team

The Commonwealth Office of Digital Experience (CODE PA) worked with Enterprise IT and subject matter experts from OB and Department of General Services to develop a strategy and procedures for onboarding agency applications and updating processes for payments.

CODE PA provided product and project management, application development, and QA for a total of 7 team members. Six team members from Enterprise IT gave technical support, offered guidance on best practices, provided technical documents and writing, shepherded EPP through security reviews, assisted with cloud management and developing a cost model for using EPP, and shared context with the vendor and stakeholders. Two staff from the Conservation and Environment IT Delivery Center acted as the lead developers and were the primary team members to support agencies by answering questions and providing drop-in hours.

Methodology

To support a smooth and efficient rollout, the project team used an Agile delivery model, specifically Scrum. This approach allowed the EPP team prioritize delivery of a Minimum Viable Product (MVP) that met the core functional needs identified in discovery. By releasing the MVP early, agencies were able to begin their integration work while the team continued delivering additional features and enhancements in iterative sprints. This incremental approach ensured continuous improvement, faster feedback cycles, and the flexibility to adjust based on agency needs throughout the implementation. This work was tracked in Azure DevOps.

Outreach and support

The EPP team offered support to agencies and leadership across COPA. Product and project managers contacted agencies early and often about the benefits of EPP, shared regular updates and resources, and followed up for key milestone dates. Whenever agency or delivery center staff reported an issue or must-have, the EPP team made every effort to incorporate it into the roadmap and releases for testing as soon as feasible for agencies to review and share feedback. The product manager and developers also offered demos of the product suite upon request.

As many agencies began integration testing, the EPP team was available to answer questions and assist in the process. Agencies and their application vendors could attend weekly drop-in hours to ask questions and work through issues. The EPP team also held weekly standing calls with several agencies to collaboratively resolve issues and support meeting key milestones and go live dates for their applications.

The EPP team set up and monitored a resource account to field ad hoc questions and disseminate product updates, feature releases information, and reporting of issues. The team sent biweekly updates to leadership in agencies and enterprise and delivery center IT that included the status for each application integrating with EPP, feature releases, and any issues that had been reported. The EPP team also reported project status and issues to the payment vendor.

Impact

Overall

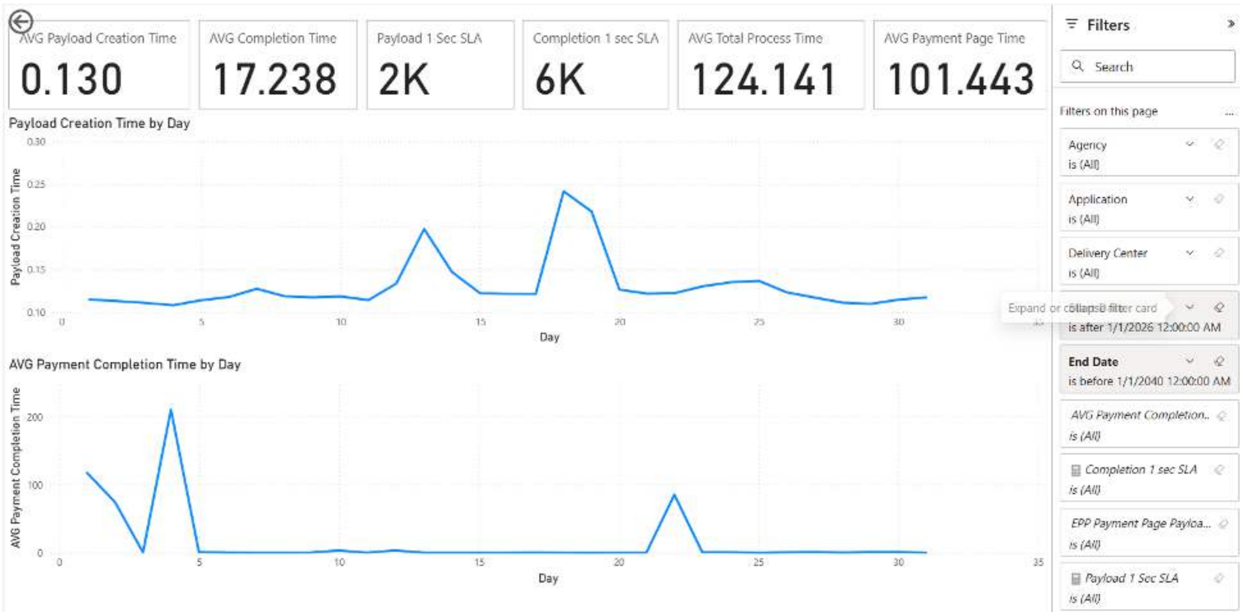
EPP has been live and in use by agency applications since December 2025. As of May 28, 2026, 74 applications across 23 agencies have integrated with EPP. Additionally, three agencies have 19 payment links live in EPP Quick Pay. Overall, EPP has handled 467,769 transactions totaling $49,479,992.42 in collected revenue for the Commonwealth. While these applications were already collecting digital payments, they now do so with EPP assisting with receipts, logging, notifications, and feature updates. Additionally, EPP ensures a standard digital payment experience for constituents and support from a centralized team for any issues that may arise.

Enhanced metrics

Prior to EPP, there was no way to centrally report on transaction speed and status across COPA. The EPP team developed metrics and regularly reviews the length of time it takes to generate a payload to EPP (payload creation time) and time to complete from EPP back to the application (payload completion time) and has SLAs of 1s for both. The EPP team can also review transactions for specific applications. Previously, agencies had to rely on customers raising issues or receiving notice from the payment vendor. The EPP team can now proactively review any slowness, check infrastructure resource utilization, and contact the vendor to resolve. The

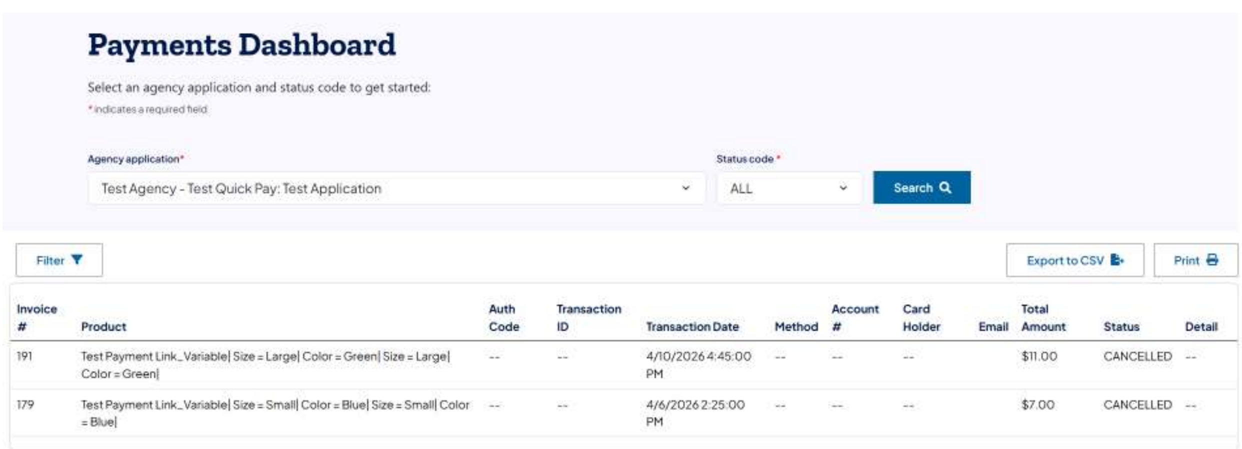
EPP team also uses a Power BI dashboard to manage user access to payment data and for which applications.

Figure 1: Example of transactions metrics dashboard



The EPP Admin web app Payments Dashboard displays transactions by application, including payment method, amount, status, payer name, and date/time for agency fiscal and business staff to review disputed transactions for constituents. This allows for easier tracking and limits the need for agencies to contact OB or the payment vendor for transaction review. The dashboard also allows for the export of data and in the future agency staff will be able to request and process refunds through the dashboard.

Figure 2: EPP Payment Dashboard



EPP Quick Pay

Agency staff also use EPP Admin to create, edit, and review payment links for EPP Quick Pay. Prior to EPP, agencies had no way to begin collecting digital payments without procuring or building an application. EPP Quick Pay allows agency staff to create a payment link that customers can use to make payments based on a scenario. Quick Pay allows for the collection of fixed, variable, and escalating fees.

Three agencies have already adopted Quick Pay to create 19 payment links that have collected $140,360.00 across 149 transactions that otherwise would have been received via paper check or money order. There are dozens to hundreds of such use-cases across the Commonwealth that EPP Quick Pay can help with, simply by offering agency-managed payment links and invoice lookups for constituents and businesses. This will be especially helpful for agencies in the midst of modernizing their permit, licensing, and certification processes, as they can now offer payees ways to pay online instead of by mail.

Saving agencies time

With EPP now live, changes that need to be made for all agency apps are done at the enterprise level. This most frequently occurs when the COPA payment vendor deploys an update or change that requires all applications integrating with it to also change. There have been two cases of this so far, each requiring about 6 hours of EPP developer time to resolve and deploy to production. Based on the number of applications integrated with EPP, these two changes alone represent a potential time savings of 288 developer hours across COPA.

As an enterprise product, EPP will continue to simplify and reduce the amount of payment-related work that agencies must perform for their specific applications. Once integration work is complete, there will be as many as 140 applications routing payments through EPP.

Future improvements to EPP will include improvements to reporting, cybersecurity updates, refunds and voids functionality, and improvements to Quick Pay for greater data collection – offering increased functionality long-term while ensuring agencies do not need to make changes to their applications or seek out an application to meet new requirements. EPP can also add to its backlog and agency-specific needs to ensure they and their constituents have the optimal digital experience. EPP will support the Commonwealth's transformation of agency permitting, licensing, and certification applications to a single enterprise platform and can be used to pay fines and renewals that do not require a new application or form.