

# Powering Modern Community Development— Boone County, KY

Boone County, KY, serving 133,000 citizens, and issuing approximately 3,500 permits each year, needed a way to bring their paper-based permitting system online in order to continue delivering quality service to constituents.

To address these challenges, Boone County, KY partnered with Oracle to implement Oracle's Permitting and Licensing applications. Oracle Consulting Services (OCS) began the implementation by conducting a business process review of Boone County's permitting processes. Based on the outputs of this review, OCS delivered best practice recommendations that would modernize the County's processes and ensure a smooth digital transformation for the County's citizens and contractors.

In less than eight months, the County was able to modernize its outdated systems and deliver the seamless, modern experience customers' of the County have come to expect. Citizens and contractors in the County now benefit from:

- **Online permitting** – to provide customer convenience and reduce reliance on paper-based processing
- **Mobile inspections** – to increase inspection speed and quality
- **Real-time permit tracking** – to streamline customer connection and care

## Finding a Solution

Boone County, KY was founded in 1798 and, as of the 2020 census, it is the 4<sup>th</sup>-most populous county in Kentucky. The county's 256 square mile area is bounded by 42 miles of the Ohio River, and is part of the Cincinnati Tri-State metro area.

The mission of the Boone County Building Department is to ensure safe minimum levels of construction through enforcement of the Kentucky Building Code and Kentucky Residential Code. This is closely followed by the enforcement of the Boone County Zoning Regulations, which provides for orderly growth of their community.

The Boone County Building Department has 12 employees using Oracle Permitting, including the chief building official, 2 permit technicians, and 9 inspectors (including plans examiners). The Department issues over 30 types of permits, performs 15 types of inspections, and processes around 3,500 permits in a typical year.

Prior to implementing the Oracle cloud solution, Boone County was using a manual paper process to issue permits and conduct inspections, typically about 3,500 permits per year. The county wanted to expand outdated systems and allow constituents to apply and pay for permits online for a seamless, efficient experience.

### Boone County goals for implementing an electronic permitting system:

- Remove time-consuming, manual, duplicative administrative tasks for inspectors, permit technicians, and plan reviewers
- Offer online application and payment capabilities to the public
- Eliminate the need for paper application forms, inspection reports, and plan review

Boone County discovered the Oracle Permitting solution in the Spring of 2020 by attending a Permitting and Inspection webinar. The County had researched and seen other permitting solutions, but none of them stood out as the answer to their needs. Oracle’s easy, intuitive solution would provide Boone County employees and constituents a seamless, efficient experience that would allow them to engage fully online.

*“The overall concept of the system is exactly what we were hoping for by engaging the permit requester and giving them access to all the information on their side without having to call the office.”*

**Jason Gamble** - IT Director, Boone County

## The Agile Implementation

In November 2020, Boone County and Oracle Consulting (OCS) kicked-off the implementation. It was clear from the beginning that there was a need to define and organize permitting workflows into a digital format, as well as an opportunity to reengineer existing processes to align with industry best practices. For the first month of the project, OCS worked closely with the County’s Product Owner, Lea Black, to explore ways to improve efficiency and organize permit application types to better fit a digital paradigm.

The initial project scope called for 12 permit types, but as analysis progressed, OCS and the County saw an opportunity to expand that list to over 30 application types to streamline processing. For example, the existing paper application form for Residential Construction Permit Application was used to collect information for numerous types of improvements. This resulted in 10 separate permit types in Oracle Permitting, which now collect more information for each of these improvement types with simpler application forms.

The image shows a 'RESIDENTIAL CONSTRUCTION PERMIT APPLICATION' form from Boone County. The form is divided into several sections:

- Header:** Boone County Building Department, 2100 Washington St. #212 Burlington, KY 41005, 859-334-2218 (Office) 859-334-2137 (Fax), www.boonecountych.gov
- Applicant Information:** Street Address, (Subdivision), (City)
- Applicant Details:** Name, Address, City/State/Zip, Phone
- Professional Information:** Licensed Engineer, Licensed Electrician, Licensed Plumber
- TYPE OF IMPROVEMENT AND USE:** Check all that apply: New Building, Single Family Dwelling, Two Family Duplex, Garage, Shed, Addition, Detachment, Swimming Pool, Deck, Retaining Wall, Finished Basement, Structural Alteration, Other
- COST OF CONSTRUCTION:** \$
- DESCRIBE PROPOSED CONSTRUCTION:** TYPE OF HEATING (Gas, Oil, Electric, Coal/wood), TYPE OF WATER (Public, Private, Flood Zone), TYPE OF SEWERAGE (Public, Private), SOILS (Sloped, Level), FARM EXEMPT? (Yes/No), FEE AREA (F of Acres), FLOOR FINISH (F of Floor, F of Basement, Finished Basement), SQUARE FOOTAGE (F of Floor, F of Basement, Finished Basement)
- APPLICANT SIGNATURE:** DATE
- ZONING APPROVAL:** DATE ISSUED, ZONE, FEE PAID, NOTES
- BUILDING OFFICIAL:** DATE ISSUED, PERMIT NO., FEE PAID, NOTES
- Permit Types List:** Basement Finish, Fence, Porch/Deck, Residential Accessory Structure (Garage, Barn, Shed), Residential Addition, Residential Alteration, Residential Demolition, Residential Single-Family Dwelling / Duplex / Townhouse, Retaining Wall, Swimming Pool/Hot Tub

Boone County embraced these very significant changes and quickly recognized several benefits of adopting best practices and leveraging modern cloud software capabilities:

- Ability to have specific “custom” intake form for each permit type
- Easy to complete online application forms that also provide transparency to contractors and the public
- Eliminating manual data entry by agency staff for new permit applications
- Providing inspectors with the ability to enter data in the field in real-time
- Providing the public with online credit card payment of permit fees
- Eliminating the need to take payments over the phone and manually enter the data

For a project of this size, OCS recommended a lean implementation plan centered on an Kanban agile methodology, which strives to identify potential bottlenecks and fix them, in an effort to maximize the efficiency of limited resources. Boone County agreed with this approach and worked with OCS over the next six months to evaluate, configure, test, and deploy their new permitting system.

The OCS team was comprised of a project manager, functional lead, and technical lead, with additional personnel contributing when needed. Boone County was led by their very experienced Building Permit Supervisor and supported by the Building Official, inspection supervisors, plan review supervisors, and key support by the Director of IT. Efficient requirements gathering and functional testing allowed Boone County staff to effectively participate in the implementation while continuing to perform their essential job duties.

## Going Live with Oracle

*“The project was more than just implementing a system. We found it so valuable as an opportunity to think about how we do our work. It’s really helped us streamline our processes.”* **Jason Gamble** - IT Director, Boone County

The initial ‘Go Live’ strategy was to execute a month-long soft launch, allowing agency staff two weeks to acclimate to the new system, followed by two weeks of self-service access for two contractors that do significant business with the city. Once completed, the county planned to open the system up to the general public.

As planned, the system went live for agency staff on June 1, 2021. Fifty-seven permits were entered in the first week. However, after the second week and a few small adjustments to configuration, things went so smoothly that agency staff decided to accelerate the rollout. On June 14, the county made the system available to all public users, two full weeks ahead of schedule.

To prepare for success, the OCS team worked closely with agency staff to execute a thorough and coordinated go-live checklist. All setup, configuration and integrations were validated. Detailed training sessions were held with administrative users and with end users.

The teamwork throughout the project and the preparation for the launch paid off. Agency staff were thrilled when the system went live, commenting on how efficient and easy to use it was. Making self-service available to the public was a huge improvement. It allowed the customers to access a service that had never been available before and let county staff focus their time and effort on work that only the agency can perform.

Best of all, the contractors and members of the public have really embraced the new system. Contractors and residents can now apply for permits, upload documents, or schedule inspections when and where it’s convenient for them. The feedback has been overwhelmingly positive.

## Measuring the Outcomes

*“The solution has changed the face of how we do business.”* **Jason Gamble** - IT Director, Boone County

In the first few months after going live, Boone County processed over 1300 permits representing just under \$400,000 in permit fees, more than 875 plan reviews, and 580 inspections. At any point in time, the county can pull real-time updates from the system on key measures to ensure processes and staff remain focused on the the most critical activities as their customer’s needs change.

The ability for customers to apply for permit applications online has transformed the role of the permit technicians. Focus has shifted from manually entering permits and process payments to helping customers achieve their permitting objectives. When it comes time for inspection, inspectors perform and result inspections with the Oracle Inspector mobile app. This reduces data entry, captures more accurate inspection documentation, and provides instant customer notification of inspection results.

Citizens also now pay for permits online. Once approved and issued, customers print the permit themselves. Customers are also kept informed of their permit status with email notifications throughout the process. This significantly reduces the telephone inquiries previously experienced by staff and gives the public much greater insight throughout the permit process. They can easily monitor and quickly react to pending application requirements. Paying online and accessing permitting documents such as approved plans, permits, and Certificates of Occupancy have made the overall process much more efficient

## The Boone County Experience

*“Oracle Consulting’s expertise and industry knowledge made this project the easiest project we could have asked for. The results are immediate and are being enjoyed by our staff and citizens alike.”*



### Scaled to Need

Cloud agility to scale solution to the business needs of both small and large customers.



### Modern

Modern cloud service delivery for citizens and contractors



### Rapidly Deployed

Deployed in less than 8 months



### Cost Effective

Delivered on-time, on-schedule and on-budget

*“The benefit of a cloud solution with quarterly releases means the investment made to improve processes and experiences for staff and the public won’t grow stale. We won’t stagnate. The working relationship that we have with the Oracle team has been very productive. They have been responsive to our needs and our feedback. With regular software updates we can count on the feedback we give them to result in improvements to the software within a few releases. That’s the kind of relationship that we were looking for.”*

**Jason Gamble** – IT Director, Boone County

## Oracle Permitting and Licensing

Effective compliance and regulation services play a vital role in ensuring the future growth and continued prosperity of governments. Oracle Permitting and Licensing is a purpose-built, cloud-native solution designed to modernize your community development service processes with extensible, reliable, simple to use technology.

Oracle’s cloud-native, configurable solution is waiting to help you transform. Learn more and take the product tours at: <https://www.oracle.com/industries/government/state-local/permitting-licensing-software/>

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## Learn more about Oracle Permitting and Licensing

Call **+1.800.ORACLE1** or visit **[oracle.com/industries/government/state-local/permitting-licensing-software/](https://oracle.com/industries/government/state-local/permitting-licensing-software/)**

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