

**A Report for
The City of Charlotte &
Mecklenburg County**

Future State Service Delivery Model

April 18, 2016

Engagement: 330028933

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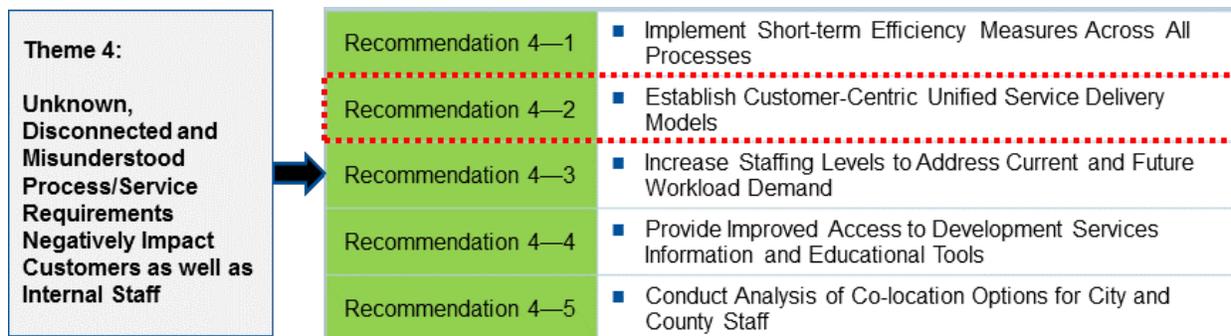
1.0 Executive Summary

1.1 Future Service Delivery Model Background and Objectives

Over the last year, the City of Charlotte and Mecklenburg County have undertaken a number of initiatives to improve development planning, building permitting and inspection operations for its Customers since Gartner conducted an independent assessment of City and County development services in early 2015. Following the assessment, the City and the County engaged Gartner to help address two recommended programs from the initial Gartner Report¹: *Program 5: Develop Future Service Delivery Model*, and *Program 6: Establish Long-Term Permitting and Plan Review Application Strategy and Implement*.

This document directly addresses *Program 5, Develop Future Service Delivery Model*, and fulfills the primary actions to act upon per Recommendation 4-2 from the original Gartner report, highlighted in Figure 1 below. The Future State Service Delivery Model will also inform Program 6 activities, which will be performed as a subsequent work stream and deliverable effort by the Gartner team, and will also become the foundation for ongoing process improvement, customer alignment and technology strategy efforts.

Figure 1. Gartner Recommendation 4: Simplify, Educate, and Establish Accountability on Delivery of Development Services



The Future State Service Delivery Model is intended to address several challenges identified in Gartner’s original report, which found that “unknown, disconnected and misunderstood process/service requirements negatively impact Customers as well as internal staff (*Theme 4*).” Customers often require significant education on processes and “hand holding” due to confusion resulting from bifurcated City and County processes, Customers’ lack of knowledge of project requirements, and difficulty navigating multiple systems and public portals. Further, City and County staff often do not know the other’s process steps or who to call to assist Customers when they are approached with questions.

As noted in the original report, in order to provide more predictable and consistent service, many jurisdictions are adopting an end-to-end service delivery approach that simplifies government interaction for customers and optimizes operations between the various departments responsible for delivering services. With this in mind, Gartner partnered with the

¹ Development Planning, Permitting and Inspection Process Review Consulting Services – Final Report, March, 2015.

City and County to develop a Future State Service Delivery Model that aims to achieve four primary objectives:

Figure 2. Future State Service Delivery Model Objectives

Future State Service Delivery Model Objectives

- 1) Evaluate existing services for opportunities to improve, simplify, establish more consistency between agencies, modify naming conventions, streamline technology use and explore other critical areas, as identified by industry.
- 2) Provide a comprehensive, easy-to-understand catalog of City and/or County development planning, building permitting and inspection services.
- 3) Elaborate on the “services,” or the collective process steps and handoffs within the City and/or County, to increase predictability, status and transparency for both Customers and internal City and County staff.
- 4) Provide the basis for high-level functional requirements that will inform the criteria for selecting the City and County’s technology strategy, part of the other Gartner work stream, Program 6.

In reference to the first objective, it should be noted that the City and County have already implemented or are implementing, many of the improvement activities encapsulated in *Recommendation 4-1, Implement Short-term Efficiency Measures across All Processes*:

- Identify City and County hand-offs that need to be completed (e.g. as in commercial process) and create cheat sheets so staff is aware of hand-off points.
- Increase regular communications to customers (e.g. call back, emails; inspector call notifying about inaccessible site).
- Enhance County inspection scheduling to account for complexity of job, availability of inspector, and other parameters.
- Define timely call-back window for any staff follow-ups to customer requests and communicate expectations to customer.
- Eliminate bottlenecks to removing holds.
- Identify opportunities for more concurrent plan reviews (e.g. fire and zoning reviews), and also alignment of the reviews
- Provide customers the opportunity to make small plan corrections or provide the required documentation before rejecting and repeating the cycle.

This report is based on the assumption that the above recommendations have already been implemented, or are in the process of being implemented, and are therefore included in the Future State Service Delivery Model. As such, these recommendations will not be repeated, but there are a number of instances where improvements (e.g., pre-submittal meetings) will be augmented or expanded to reap additional benefits.

It is important to note the Future State Service Delivery Model is not intended to be a complete overhaul or major modification of the City and County’s current business processes and approach to meeting regulatory requirements, but is rather a streamlining, reorganization and

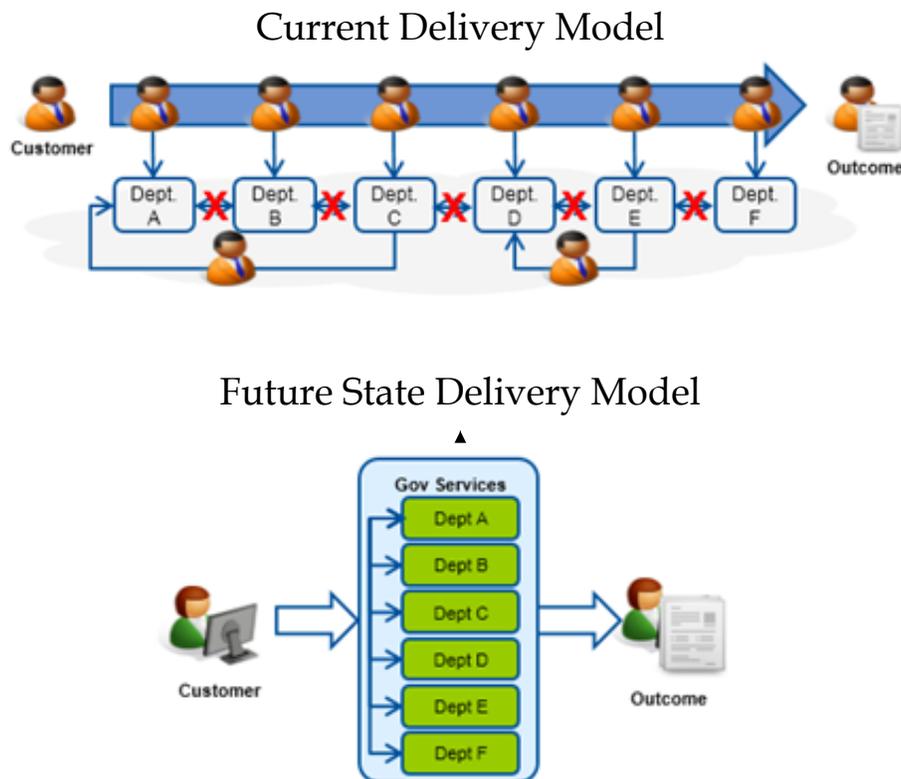
rebranding effort. The Future State Service Delivery Model implements efficiencies and improvements where appropriate, seeks to integrate City and County processes, and communicates specific actions required to implement the model. Ultimately, the Future State Service Delivery becomes the “backbone” for operations that underpins technology, process and organization decisions in a manner that is focused on achieving and communicating customer outcomes.

1.2 What is a Service?

A ‘service’ is a series of City and/or County business processes that collectively help a Customer achieve a desired outcome, whether that is obtaining a simple permit, filing a zoning variance, or understanding all of the inspection requirements for a residential project. In other words, it combines the various process steps required to achieve an outcome in an easy-to-understand manner that allows customers to fully understand the major milestones, timing and requirements to achieve that outcome.

The intent is to **simplify the path to completion** for customers by defining a finite set of services aligned to common outcomes and objectives – illustrated by the green bars in the figure below – while **clearly defining and optimizing the processes and handoffs** between the City and County (where appropriate) to deliver those services.

Figure 3. Customer-Centric Delivery Model



The resulting Future State Service Delivery Model effectively amasses the disjointed efforts, points of entry, status reporting methods, and other operational elements currently in place and standardizes them so customers can more effectively and efficiently work with government.

Some services will retain similar names and process steps. Others will be rebranded and require additional coordination between the City, County and Towns, increased use of technology, or other actions to meet the objectives for the Future State Service Delivery Model. However, the ultimate goal is to develop an optimized model that aligns with the guiding principles defined by the City and County during the initial engagement with Gartner, illustrated in the figure below.

Figure 4. Guiding Principles for City, County and Town Development Services



1.3 Key Concepts for Understanding the Service Delivery Model

Critical to the Future State Service Delivery Model is an understanding of the core concepts that underpin it. Gartner created logical groupings to help categorize common activities and processes to help remove inefficiencies and confusion commonly cited by industry. The table below describes the four core concepts that comprise the Future State Service Delivery Model.

Table 1. Future State Service Delivery Model Concepts

Concept	Description	Examples
Service Categories	...consist of several services that are logically grouped together given they yield similar, or related, desired Customer outcomes.	<ul style="list-style-type: none"> ▪ Simple Permitting Services ▪ Zoning Services ▪ Development Services
Services	...finite list of development services offerings delivered by government (City, County and/or Towns) in easy-to-understand terminology, that is comprised of multiple Lifecycle Steps properly sequenced to achieve the Customers' desired outcome.	<ul style="list-style-type: none"> ▪ Apply for Simple Residential Permit ▪ Apply for Conditional Rezoning

		<ul style="list-style-type: none"> ▪ Submit Townhouse Project
Lifecycle Step	...consists of several business processes that are logically grouped to provide easy-to-reference catalogs of several properly sequenced processes required to deliver the service.	<ul style="list-style-type: none"> ▪ Application Submission & Processing ▪ Plan Review ▪ Inspection and Enforcement
Business Processes	...define the major procedural steps performed by Customers and/or Staff to satisfy requirements for a specific function.	<ul style="list-style-type: none"> ▪ Compliance Review ▪ Prepare for Hearing ▪ Pay Fee

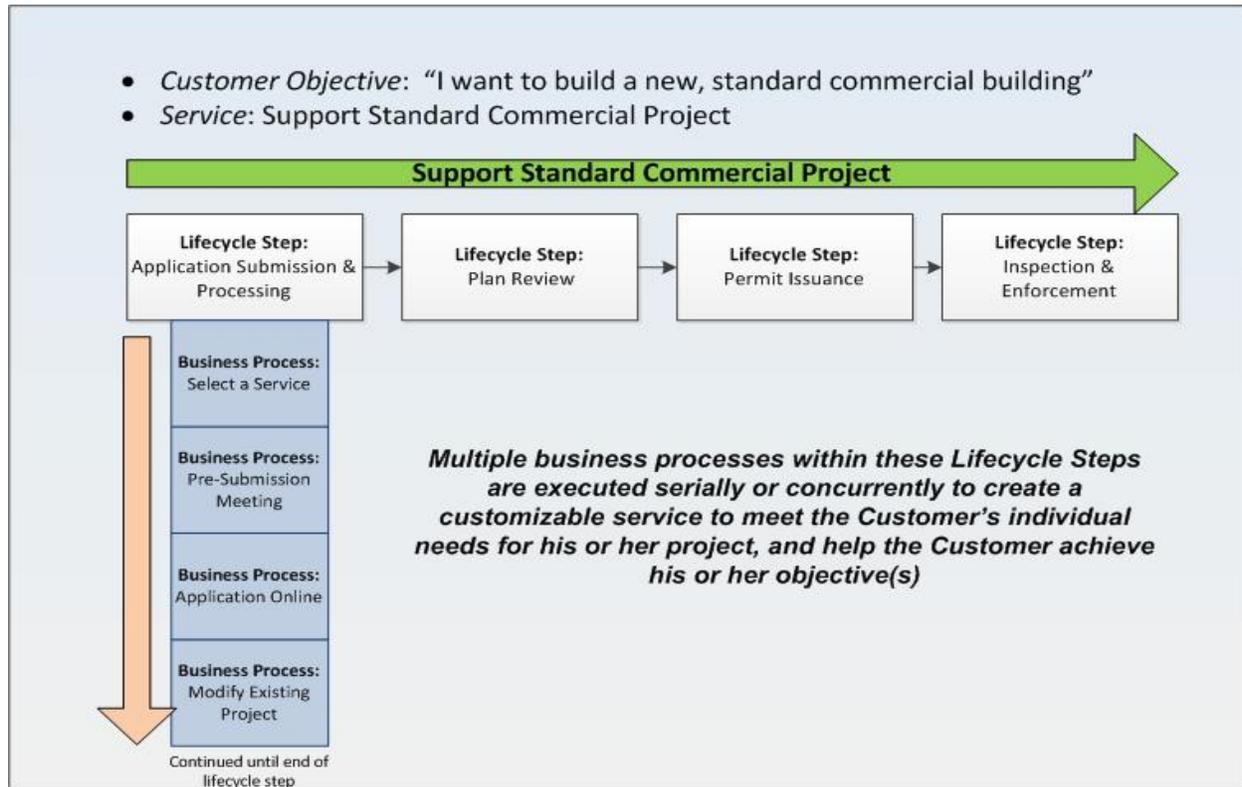
The lifecycle steps and associated business processes are presented in this document in their own section because many common business processes occur across more than one service (for example, all services will have an application submittal business process), and it would be redundant to describe the application submittal process in detail for each service.

Every project is different. While two customers may each submit commercial development applications, the projects may take very different paths, which affects the business processes that may be executed to deliver that service. For example, Person A may take advantage of expedited plan review and inspection processes, while Person B may never choose to utilize those processes. As such, the Future State Service Delivery Model is customizable to each Customer’s needs, providing a standard set of business processes to choose from.

This flexibility and Customer-centric focus is a key benefit of the Future State Service Delivery Model. While the services provided and supporting business processes are predictable and well-defined, the options available to the Customer are tailored to his or her needs and project type. There will always be exceptions to manage, but employing an approach that can optimize the majority of Customer interactions will achieve a number of benefits sought by the City and County.

For example, if a Customer’s objective is to initiate and complete a new commercial development project, the City and the County offers the “Support Standard Commercial Project Service” to support the project through a series of Lifecycle Steps that, in turn, are comprised of a number of business processes. Some of the Lifecycle Steps and Business Processes are standard, others are a result of the specific nature of the commercial project of the specific customer. However, defining the component pieces required to deliver the service, with built-in flexibility to account for the specific characteristics and objectives of the customer, creates a Future State Service Delivery Model that is more predictable, efficient and transparent.

Figure 5. Example Service – Support Standard Commercial Project



The “Support Standard Commercial Project Service” streamlines the Customer’s experience by tying together the business processes currently required by the County and the City today to support commercial development projects. The City and County processes are integrated, rather than disparate, and redundant activities for the Customer are eliminated. Finally, there are defined milestones within each service that can communicate progress to the customer, as well as to the City and County.

This approach builds off of previous efforts by the City and County, most notably the Commercial Plan Review Process transit stop model¹, which identifies the sequence of higher-level activities to clearly communicate key milestones for a service. Other jurisdictions are adopting a similar approach of ‘walking the client’ through the major milestones to help facilitate understanding and execution, and making it easy to gain status information. For example, the City of Boston’s Permit Finder adopts a similar approach, using plain language to articulate key milestones, and allow customers to easily navigate to obtain the desired status information.²

Additionally, it should be noted that descriptions of services and the associated business processes are oriented towards an online, self-service model for Customer initiation of an application. Descriptions of these services and processes in subsequent sections will assume that a Customer initiates his or her request through a joint City/County online portal. This should be the recommended intake procedure for Customers, however it is expected that some Customers may still opt to initiate transactions in paper and/or in person. We understand that

¹ <http://charmec.org/development/commplan/Pages/default.aspx>

² <http://permitfinder.boston.gov/details.html>

this alternate path will exist, however we do not address this path in detail in our descriptions. It is assumed that if a transaction initiates in person and/or in paper, then City or County staff will be responsible for scanning and data entering the information into the system.

1.3.1 Service Categories and Services

Gartner has organized the services provided by the City and County into three major categories: **Simple Permitting Services, Zoning Services, and Development Services**. Establishing this initial categorization helps customers select the correct “door” to enter to achieve its objectives and can inform customer segmentation efforts and technology strategy decisions to streamline operations. Each of the three Service Categories are described in the table below.

Table 2. Service Categories and Associated Services

Service Category	Service Descriptions
<p>Simple Permitting Services</p> 	<p>Simple Permitting Services Provided:</p> <ul style="list-style-type: none"> ▪ Issue Instant Permits ▪ Issue Standard Permits ▪ Issue Special Permits <p>Includes services for Customers who wish to pull permits that do not require a complex issuance process. The service provided depends on the type of permit being issued.</p>
<p>Zoning Services</p> 	<p>Zoning Services Provided:</p> <ul style="list-style-type: none"> ▪ Support Formal Review of Zoning Request ▪ Support Administrative Review of Zoning Request <p>Includes services to support Customers who are requesting administrative or formal review and approval of zoning requests (i.e. rezoning, variances and appeals, historic district reviews).</p>
<p>Development Services</p> 	<p>Development Services Provided:</p> <ul style="list-style-type: none"> ▪ Support Subdivision Project ▪ Support Residential Project ▪ Support Standard Commercial Project ▪ Support Complex Commercial Project <p>Includes plan review and inspection services related to residential, commercial, and subdivision development projects. The service provided depends on the project type and project complexity.</p>

Services are described in more detail in Section 2 – Future State Service Delivery Model. A total of 9 base services are described, comprised of a number of supporting business processes depending on the project or outcome desired by the Customer. The customer segments that would consume the service are provided with each service description. The supporting business processes that comprise each service are then further described in the subsequent section.

1.3.1.1 Technology Considerations

Within the service model sections, we have identified some potential technology requirements that should be considered during Program 6 when identifying a technology solution to support the Service Delivery Model. These technology considerations are all capabilities that are offered in the Licensing & Permitting vendor marketplace today. An example is provided below:

Figure 6. Sample Technology Considerations for a Service



Technology Considerations for Program 6: Establish Long-Term Permitting and Plan Review Application Strategy and Implement

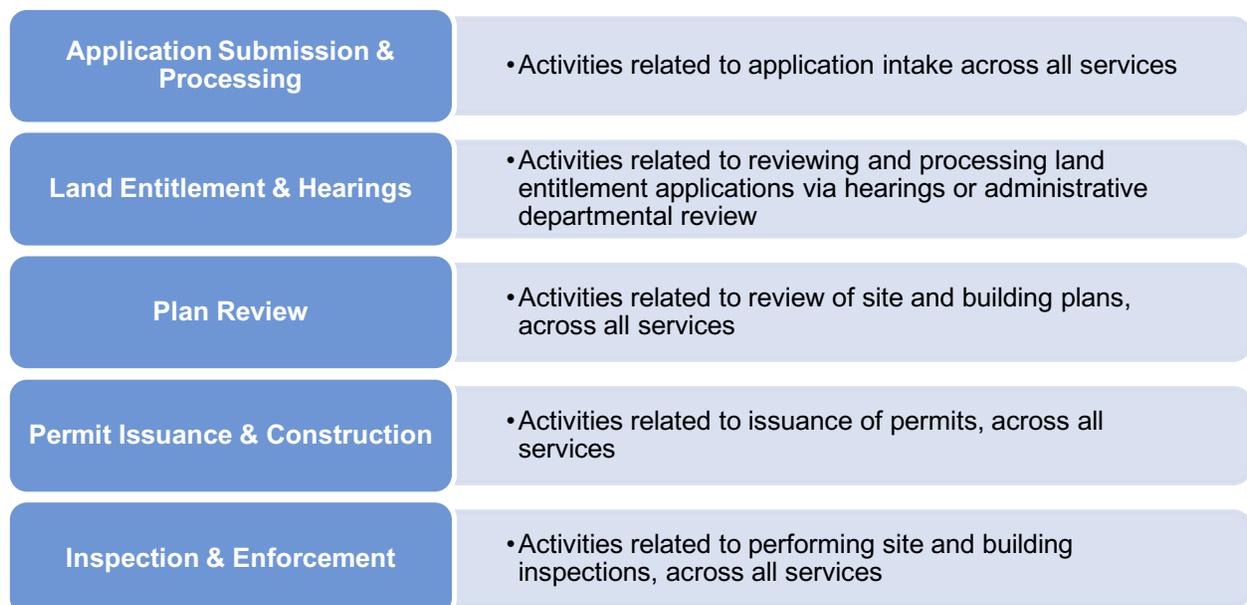
- Consolidation of multiple online customer portals into one, single portal for all customers across all organizations.
- Single online payment gateway for all online transactions.
- Configurable solution that supports automated workflow and business rules.

1.3.2 Lifecycle Steps

As noted above, services can be further decomposed into organized sets of business processes, or Lifecycle Steps, which are based on best practices Gartner has observed in other jurisdictions but are tailored to the specific characteristics of the City and the County. The grouping conventions are intended to provide an easy to reference catalog of commonly understood steps that “speak the language” of the customer and also provide measurable progress points that can be communicated to alert customers and City and County staff alike.

Services have a one-to-many relationship with lifecycle steps. In other words, each of the defined services is comprised of between 3-5 Lifecycle Steps. Figure 7 below provides an overview of the five (5) Lifecycle Steps.

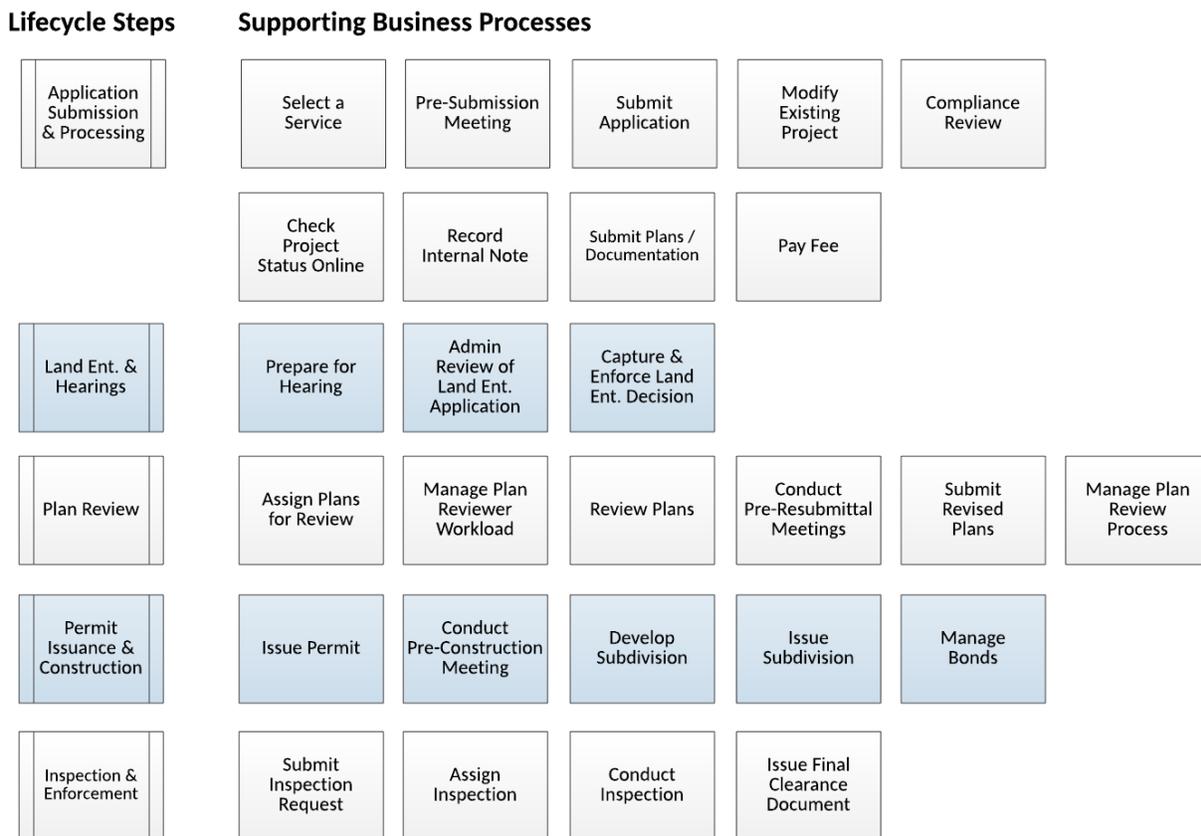
Figure 7. Future State Lifecycle Steps



1.3.3 Business Processes

Similar to the relationship between services and Lifecycle Steps, the relationship between Lifecycle Steps and business processes is also one to many. Within the five Lifecycle Steps identified above, multiple business processes link together to collectively deliver a service. The figure below identifies all future state business processes by Lifecycle Phase. The 25 total business processes are outlined in further detail in Section 3 – Future State Business Processes.

Figure 8. Future State Business Processes by Lifecycle Step



1.4 Overview of Future State Service Delivery Model

By deconstructing development planning, building permitting and inspection operations into defined and repeatable “building blocks,” the City and County can achieve greater predicatibility, transparency and efficiency. Although no model can account for every project permutation, possibiilitis and anomalies that will continue to occur on a regular basis, the resulting Future State Service Delivery Model encapsulates and addresses commonly requested services and also identifies the services that require City and County coordination, all to address the primary issues and concerns expressed by stakeholders.

Table 3. Future State Service Delivery Model

Future State Service Delivery Model - Services	Supporting Lifecycle Steps			
Category: Simple Permitting Services				
Service: Issue Instant Permits (No Review)				
Customer Objective: Apply for an Instant Residential Trade Permit	Application Processing		Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for an Instant Commercial Trade Permit	Application Processing		Permit Issuance	Inspection & Enforcement
Service: Issue Standard Permits				
Customer Objective: Apply for a Simple Residential Trade Permit	Application Processing		Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for a Simple Commercial Trade Permit	Application Processing		Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for a Sign Permit	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for a Zoning Use Permit	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Service: Issue Special Permits				
Customer Objective: Apply for a Special Event, Parade and/or Festival-related Permit	Application Processing		Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for a Tent Permit	Application Processing		Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for Other Temporary Permit Types	Application Processing		Permit Issuance	Inspection & Enforcement
Category: Zoning Services				
Service: Support Formal Review of Zoning Request				
Customer Objective: Apply for Conventional Rezoning	Application Processing	Plan Review	Land Entitlement	
Customer Objective: Apply for Conditional Rezoning	Application Processing	Plan Review	Land Entitlement	
Customer Objective: Apply for Text Amendment	Application Processing	Plan Review	Land Entitlement	
Customer Objective: Apply for Zoning Variances and Appeals	Application Processing	Plan Review	Land Entitlement	
Customer Objective: Apply for Certificate of Appropriateness	Application Processing	Plan Review	Land Entitlement	
Service: Support Admin. Review of Zoning Request				
Customer Objective: Apply for Admin. Amendment to an Approved Rezoning Plan	Application Processing	Plan Review	Land Entitlement	
Customer Objective: Apply for Admin. Deviation of Zoning Ordinance	Application Processing	Plan Review	Land Entitlement	
Customer Objective: Apply for Historic District Admin. Review	Application Processing	Plan Review	Land Entitlement	
Category: Development Services				
Service: Support Subdivision Project				
Customer Objective: Apply to Subdivide Land	Application Processing		Plan Review	May Need: Permit Issuance May Need: Inspection & Enforcement
Service: Support Residential Project				
Customer Objective: Submit Standard Residential Project	Application Processing		Plan Review	Permit Issuance Inspection & Enforcement
Customer Objective: Submit Townhouse Project	Application Processing		Plan Review	Permit Issuance Inspection & Enforcement
Customer Objective: Submit Master Plan Project	Application Processing		Plan Review	Permit Issuance Inspection & Enforcement
Service: Support Standard Commercial Project				
Customer Objective: Submit Small Commercial Project	Application Processing		Plan Review	Permit Issuance Inspection & Enforcement
Customer Objective: Submit Large Commercial Project	Application Processing		Plan Review	Permit Issuance Inspection & Enforcement
Service: Support Complex Commercial Project				
Customer Objective: Submit "Mega" Commercial Project (High Rise, Large Schools, Malls, Large Mix Use Project, Airports, Stadiums, Waste Water Treatment Plants, Arenas)	Application Processing		Plan Review	Permit Issuance Inspection & Enforcement
Customer Objective: Submit "Hybrid/HCDT" Commercial Project (Use 3D computer modeling; example: Hospital)	Application Processing		Plan Review	Permit Issuance Inspection & Enforcement

While the above graphic presents an all-encompassing overview, the specifics of the Future State Service Delivery Model, as well as the benefits and pain points addressed, are further described in the body of this document.

1.5 Actions to Implement Future State Service Delivery Model and Recommended Next Steps

In order to implement the Future State Service Delivery Model there are a number of actions that need to be executed, some of which are tactical in nature, others that are more strategic, similar to the level of the recommendations developed in the original Gartner study. As noted earlier, the Future State Service Delivery Model simplifies identification, execution and tracking of development services provided by the City, County and Towns – it is not intended to be a major overhaul to the business processes in place today. It leverages what is working well today, offers recommendations for improvement, and also seeks to enhance internal and external communication and collaboration.

As such, the tactical actions identified are the immediate steps required to implement the model, which will allow for improved customer segmentation and overall service, will serve as the backbone for technology strategy, and will enhance the ability to implement key metrics that are measurable and meaningful to the customer. Efficiency measures, in addition to those already identified through previous work, are also identified. In contrast, the strategic recommendations will be addressed in future, planned activities and/or require vetting with City and County leadership prior to implementation.

1.5.1 Improvement Opportunities and Tactical Actions to Implement Service Model

The improvement opportunities and tactical actions to implement the Future State Service Delivery Model are identified throughout the document at both the Service and Business Process level – noted as an “Area of Focus” throughout the document. For each Area of Focus, Gartner describes the current state issues, the future improvements, the benefits and beneficiaries, and the next steps to achieve the future state, which are essentially tactical recommendations to augment those already implemented by the City and County as part of *P4 - Implement Immediate Process and Technology Improvements*. The figure below provides a snapshot of how this information will be communicated throughout the document.

Table 4. Sample Format for Communication Improvement Opportunities and Tactical Actions to Implement Service Model

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
Overall Residential Project Services	<ul style="list-style-type: none"> ▪ Multiple processes are in place to support residential projects, which can be confusing to Customers. ▪ Customers must research where to submit their projects, and figure out who to contact if they have questions. 	<p>Given that the City and the County collaborate and work within the same process framework for residential projects, the gap between the current state and the future state is not large. Improvements include the following:</p> <ul style="list-style-type: none"> ▪ Consolidation of multiple processes to support residential projects 	<p>This change benefits the Customer who will no longer need to navigate multiple processes and not have to research where/who to submit to.</p> <p>Beneficiaries:</p> <ul style="list-style-type: none"> ▪ Architects ▪ Engineers ▪ Residential Building Contractors ▪ Homeowners ▪ Realtors/Brokers 	<ul style="list-style-type: none"> • Consolidate existing multiple online portals into one comprehensive portal for all residential projects. • Setup townhouse plan review in system: <ul style="list-style-type: none"> ▪ Application Form ▪ Routing Rules ▪ Plan Reviews Required

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
		into one process that supports multiple project types		<ul style="list-style-type: none"> ▪ Inspections Required

1.5.2 Strategic Recommendations

The Future State Service Delivery Model also generates a number of strategic recommendations that underpin or enhance the benefits achieved by implementing the tactical actions to bring the new model to fruition. A number of these, as noted below, will be addressed as part of the second work stream Gartner is assisting with, *Program 6: Establish Long-Term Permitting and Plan Review Application Strategy and Implement*.

- 1) Transition from multiple, disparate application submittal processes across the City, County, and other agencies to a **single application initiation and submission process and point of entry** that intakes all application types. Provide a single place for Customers to go to maintain their projects and communicate with City/County resources. This will be a key input into the second work stream Gartner is assisting with, *Program 6: Establish Long-Term Permitting and Plan Review Application Strategy and Implement*.
- 2) Implement a mechanism, such as an online wizard, that **assists new or uneducated Customers through the application process**. This reduces the need for Customers to navigate to multiple websites and/or contact multiple personnel across the City, County, and other agencies to research processes and procedures. This will be a key input into the second work stream Gartner is assisting with, *Program 6: Establish Long-Term Permitting and Plan Review Application Strategy and Implement*.
- 3) Implement an **automated zoning check** (where possible) to execute at the time of building permit application submission to validate the permit complies with land use conditions captured for that property (where possible), rather than relying on manual workarounds and a separate application submission process to the City and the County. This will be a key input into the second work stream Gartner is assisting with, *Program 6: Establish Long-Term Permitting and Plan Review Application Strategy and Implement*.
- 4) Trigger **automated zoning reviews** to execute at the time of building permit application submission based on the conditions associated with that property, such as location within a floodplain or historical district, rather than relying on manual workarounds and the convoluted project holds currently in place in POSSE today. This will be a key input into the second work stream Gartner is assisting with, *Program 6: Establish Long-Term Permitting and Plan Review Application Strategy and Implement*.
- 5) Transition from a siloed, segmented plan review where the Customer must submit multiple versions of plans to the City and the County and where plan reviews occur separately from each other, to a **collaborative, concurrent and entirely electronic plan review process**.
 - Collaborative: Reviewers should be able to see all sets of plans, each other's plan review comments, and communicate internally to address any issues. Stakeholders that will later be assigned to inspect the property (i.e. Fire, County Code Enforcement) will also participate in the review.

- Concurrent: Plan review should occur concurrently across all plan reviewers, reducing the issue of a Customer proceeding through building development without addressing land development concerns.
 - Electronic: Charlotte Water and NCDOT currently conduct their reviews manually on paper plans. Either these agencies should adopt electronic plan review technology, or alternate processes and workarounds will need to be put in place to capture their review results in the system to preserve the authenticity of the project record and to track the activity.
- 6) **Require application pre-submittal meetings** for the most complex, risky project types (currently they are optional for all projects). Where realistic and feasible, the Customer should only be required to participate in one pre-submission meeting and the meeting should be inclusive of City, County, and other involved agencies' personnel.
 - 7) **Rebrand the names of premium services**, such as expedited plan review and inspection services, to be reflective of the services provided and to be inclusive of services provided by both the City and the County, to reduce Customer confusion with the options available to them.
 - 8) **Transition to have both the City and the County operate on a First-In, First-Out plan review process** that is associated with realistic, predictable performance metrics to reduce inconsistencies and improve the plan review process. As the County evaluates the implementation options in the future, the County may need to consider a hybrid approach for a period of time to support the transition (where some projects follow FIFO and others follow OnSchedule) if the implementation requires additional staff and a need to increase Customer fees that the County cannot support immediately.
 - 9) **Standardize the inspection request process** across all inspecting agencies to initiate from one submission point. Currently Customers can request inspections from a variety of different channels, such as both City and County websites, City and County phone numbers, City and County individual inspectors, etc., which is inconsistent and does not give an accurate, comprehensive of inspection activity across both the City and the County.

Gartner will review these strategic recommendations with the City, County and Towns to elaborate on the basis for providing the individual recommendation, the recommended path to implementing the recommendation, and the relative priority of each.

1.5.3 Guiding Principles for Using the Future State Service Model

The Future State Service Delivery Model should be used as a framework for introducing and managing new services provided by the City and the County going forward. When determining whether to, and how to, introduce and implement a new service, the City and the County should ensure that it complies with the the guiding principles for using the Service Model, agreed to by both the City and the County. The City and the County should be mindful of exceptions – for example, standard services should not be created that encourage Customers to proceed down the alternative path.

The guiding principles for using the Service Delivery Model are illustrated in the diagram below.

Figure 9. Future State Service Model Guiding Principles



2.0 Service Description Section

Gartner has organized the services provided by the City and County into three major categories:

- Simple Permitting Services
- Zoning Services
- Development Services.

Establishing this initial categorization helps customers select the correct “door” to enter to achieve his or her objectives. Each of the three Service Categories are described in the table below.

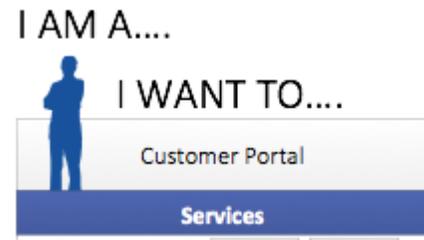


Table 5. Service Categories and Associated Services

Service Category	Service Descriptions
<p>Simple Permitting Services</p> 	<p>Simple Permitting Services Provided:</p> <ul style="list-style-type: none"> ▪ Issue Instant Permits ▪ Issue Standard Permits ▪ Issue Special Permits <p>Includes services for Customers who wish to pull permits that do not require a complex issuance process. The service provided depends on the type of permit being issued.</p>
<p>Zoning Services</p> 	<p>Zoning Services Provided:</p> <ul style="list-style-type: none"> ▪ Support Formal Review of Zoning Request ▪ Support Administrative Review of Zoning Request <p>Includes services to support Customers who are requesting administrative or formal review and approval of zoning requests (i.e. rezoning, variances and appeals, historic district reviews).</p>
<p>Development Services</p> 	<p>Development Services Provided:</p> <ul style="list-style-type: none"> ▪ Support Subdivision Project ▪ Support Residential Project ▪ Support Standard Commercial Project ▪ Support Complex Commercial Project <p>Includes plan review and inspection services related to residential, commercial, and subdivision development projects. The service provided depends on the project type and project complexity.</p>

The figure below illustrates the Future State Service Delivery Model in its entirety. The services are listed vertically in the left column, under their respective service categories, and are highlighted in light orange. Customer objectives that the service will support are listed below in white. The table then lists the supporting Lifecycle Steps of the service in the second column.

Table 6. Future State Service Delivery Model

Future State Service Delivery Model - Services	Supporting Lifecycle Steps			
Category: Simple Permitting Services				
Service: Issue Instant Permits (No Review)				
Customer Objective: Apply for an Instant Residential Trade Permit	Application Processing		Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for an Instant Commercial Trade Permit	Application Processing		Permit Issuance	Inspection & Enforcement
Service: Issue Standard Permits				
Customer Objective: Apply for a Simple Residential Trade Permit	Application Processing		Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for a Simple Commercial Trade Permit	Application Processing		Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for a Sign Permit	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for a Zoning Use Permit	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Service: Issue Special Permits				
Customer Objective: Apply for a Special Event, Parade and/or Festival-related Permit	Application Processing		Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for a Tent Permit	Application Processing		Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for Other Temporary Permit Types	Application Processing		Permit Issuance	Inspection & Enforcement
Category: Zoning Services				
Service: Support Formal Review of Zoning Request				
Customer Objective: Apply for Conventional Rezoning	Application Processing	Plan Review	Land Entitlement	
Customer Objective: Apply for Conditional Rezoning	Application Processing	Plan Review	Land Entitlement	
Customer Objective: Apply for Text Amendment	Application Processing	Plan Review	Land Entitlement	
Customer Objective: Apply for Zoning Variances and Appeals	Application Processing	Plan Review	Land Entitlement	
Customer Objective: Apply for Certificate of Appropriateness	Application Processing	Plan Review	Land Entitlement	
Service: Support Admin. Review of Zoning Request				
Customer Objective: Apply for Admin. Amendment to an Approved Rezoning Plan	Application Processing	Plan Review	Land Entitlement	
Customer Objective: Apply for Admin. Deviation of Zoning Ordinance	Application Processing	Plan Review	Land Entitlement	
Customer Objective: Apply for Historic District Admin. Review	Application Processing	Plan Review	Land Entitlement	
Category: Development Services				
Service: Support Subdivision Project				
Customer Objective: Apply to Subdivide Land	Application Processing		Plan Review	May Need: Permit Issuance May Need: Inspection & Enforcement
Service: Support Residential Project				
Customer Objective: Submit Standard Residential Project	Application Processing		Plan Review	Permit Issuance Inspection & Enforcement
Customer Objective: Submit Townhouse Project	Application Processing		Plan Review	Permit Issuance Inspection & Enforcement
Customer Objective: Submit Master Plan Project	Application Processing		Plan Review	Permit Issuance Inspection & Enforcement
Service: Support Standard Commercial Project				
Customer Objective: Submit Small Commercial Project	Application Processing		Plan Review	Permit Issuance Inspection & Enforcement
Customer Objective: Submit Large Commercial Project	Application Processing		Plan Review	Permit Issuance Inspection & Enforcement
Service: Support Complex Commercial Project				
Customer Objective: Submit "Mega" Commercial Project (High Rise, Large Schools, Malls, Large Mix Use Project, Airports, Stadiums, Waste Water Treatment Plants, Arenas)	Application Processing		Plan Review	Permit Issuance Inspection & Enforcement
Customer Objective: Submit "Hybrid/HCDT" Commercial Project (Use 3D computer modeling; example: Hospital)	Application Processing		Plan Review	Permit Issuance Inspection & Enforcement

The nine base services, within the three major service categories, are described in more detail in subsequent sections.

2.1 Simple Permitting Services Category

The services within the Simple Permitting category issue permits that do not require a complex review process.



These services are described in more detail in the following sections:

- Issue Instant Permits (No Review)
- Issue Standard Permits
- Issue Special Permits

2.1.1 Service: Issue Instant Permits (No Review)

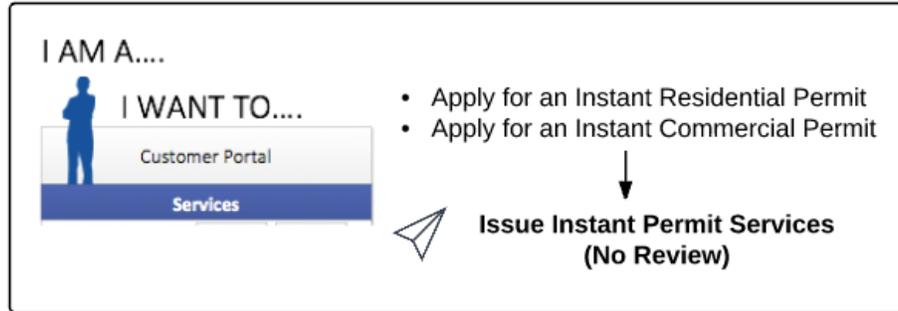
This section describes the Issue Instant Permits Service (No Review), within the Simple Permitting Services Category. The naming convention “Instant” conveys to the Customer that these permits are issued immediately upon application submission and payment. This service, and its supporting lifecycle steps, is outlined in the table below.

Table 7. Issue Instant Permits

Future State Service Delivery Model - Services	Supporting Lifecycle Steps		
Category: Simple Permitting Services			
Service: Issue Instant Permits (No Review)			
Customer Objective: Apply for an Instant Residential Trade Permit	Application Processing	Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for an Instant Commercial Trade Permit	Application Processing	Permit Issuance	Inspection & Enforcement
Service: Issue Standard Permits			
Customer Objective: Apply for a Simple Residential Trade Permit	Application Processing	Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for a Simple Commercial Trade Permit	Application Processing	Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for a Sign Permit	Application Processing	Plan Review Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for a Zoning Use Permit	Application Processing	Plan Review Permit Issuance	Inspection & Enforcement
Service: Issue Special Permits			
Customer Objective: Apply for a Special Event, Parade and/or Festival-related Permit	Application Processing	Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for a Tent Permit	Application Processing	Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for Other Temporary Permit Types	Application Processing	Permit Issuance	Inspection & Enforcement

Future State Description

“Instant Permits” are residential or commercial trade permits that do not require *any* review prior to issuance, according to the City and County’s business rules. A Customer that wants to apply for these types of permits will choose to initiate the Issue Instant Permit service. This joint City and County service will issue all permit types that do not require staff review.



The customer will navigate to a joint City/County online portal and apply for the desired instant permit. Upon payment of required fees, the permit generates instantly and is printed from the online portal by the Customer. This may automatically trigger an inspection(s) in a system that the Customer must address in the future before they can receive a Certificate of Occupancy or other final clearance document, depending upon the requirements for that permit and/or project type.

No cross-departmental coordination is needed for this service, as the issuance of the permit is fully automated and driven entirely by a system's workflow and configuration.

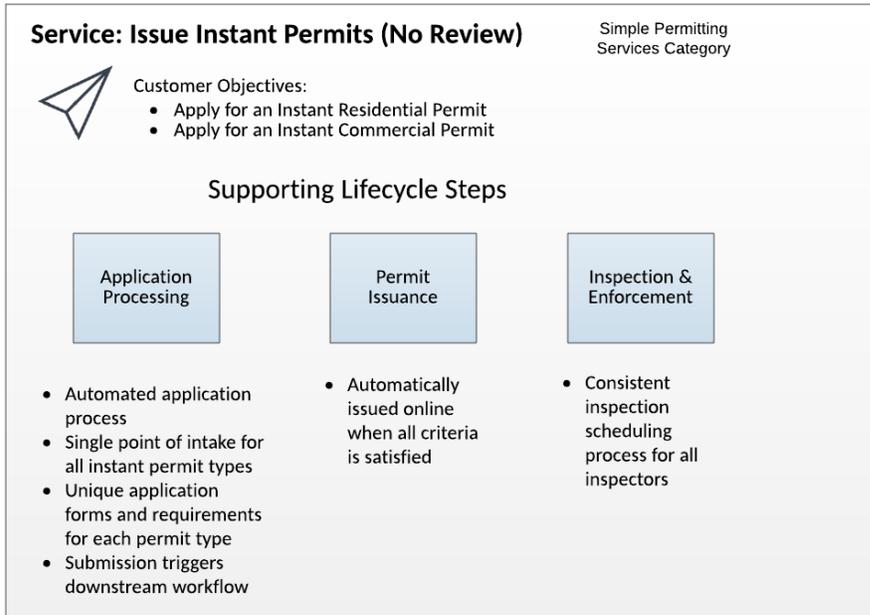
Customer Segments that would consume this service include:

- Homeowners
- Engineers
- Residential Building Contractors
- Contractors
- Owners/Developers
- Small Business Developers

*Customer Segments developed by Customer Service Solutions (CSS)

The service utilizes three major Lifecycle Steps, highlighted below:

Figure 10. Issue Instant Permit (No Review) Service - Supporting Lifecycle Steps



These Lifecycle Steps and supporting business processes are discussed in more detail in [Section 3](#).

An example of a project utilizing this service is illustrated below. Projects differ from each other, and not every alternate path is illustrated in the diagram, but with defined Lifecycle Steps and Business Processes, the track each project will follow is predictable, and can be measured, managed, and communicated.

Figure 11. Sample Project Supported by the Instant Permit Service

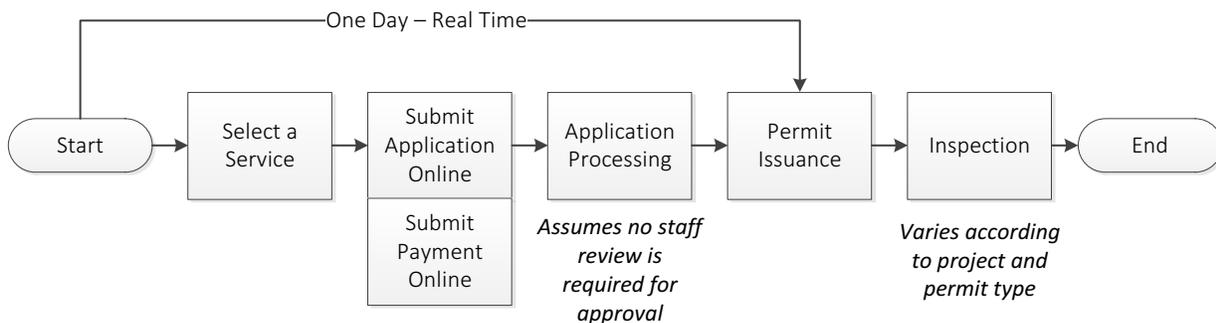


Figure 12. Technology Considerations to Support Instant Permit Service



Technology Considerations for Program 6: Establish Long-Term Permitting and Plan Review Application Strategy and Implement

- Consolidation of multiple online customer portals into one, single portal for all customers across all organizations.
- Single online payment gateway for all online transactions.
- Configurable solution that supports automated workflow and business rules.

Current State Description

Note: The current state description is based on information provided to Gartner as of June 2015. The County currently issues multiple permit types that do not require a review by staff prior to issuance. There are various County online portals that have been created to support the issuance of these permit types:

- Homeowner Internet Permitting (HIP) – Issues residential permits that do not require a plan review. If plan review or zoning is not needed, and provided that there are no GIS restrictions, then the permit is issued upon payment (E-check or credit card).
- Trade Internet Permitting (TIP) – Issues trade internet permits for a project that do not require a building permit or plan review. Upon completion of the TIP application, if funds are available in the customer’s account, the permit is processed/validated and ready for the Customer to print through their online account immediately.

The Issue Instant Permits service will consolidate these existing portals into a single application and issuance process for all instant permit types.

Table 8. Gap Analysis Between Current State and Future State Instant Permit Service Delivery

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
Overall Instant Permit Services	<ul style="list-style-type: none"> ▪ Multiple processes are in place to support various internet permit types, which can be confusing to Customers. ▪ Customers must research where to submit their projects, and figure out who to contact if they have questions. 	<ul style="list-style-type: none"> ▪ Consolidation of multiple online customer portals into one, single portal for all customers across all organizations. ▪ Standardization of processes to ensure consistent expectations. ▪ Naming convention improvements 	<p>Customers will no longer need to navigate multiple processes for different permit types nor have to research where/who to submit to.</p> <p>Beneficiaries:</p> <ul style="list-style-type: none"> ▪ Engineers ▪ Residential Building Contractors ▪ Homeowners 	<ul style="list-style-type: none"> ▪ Standardize the process for all instant internet permit types. ▪ Configure workflow and existing user interfaces to ensure a consistent user experience. ▪ Consider consolidating existing multiple online portals into one comprehensive portal for all projects.
Application Processing	<ul style="list-style-type: none"> ▪ Multiple application submission points and processes for internet permits. 	<ul style="list-style-type: none"> ▪ Transition to a single point of submission for all permit types and application information to reduce confusion for the Customer. 	<p>Streamlining the application intake and plan submittal process will simplify the Customer experience as they will no longer need to submit multiple applications to multiple jurisdictions or departments and thus potentially reduce overall cycle times.</p> <p>Beneficiaries:</p> <ul style="list-style-type: none"> ▪ Architects ▪ Engineers ▪ Residential Building Contractors ▪ Homeowners ▪ Realtors/Brokers 	See Section 3.2
Permit Issuance	N/A	No changes are proposed to the current process in place	N/A	N/A

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
Inspection & Enforcement	<ul style="list-style-type: none"> ▪ Inconsistent inspection scheduling processes across the City, County, and other agencies. 	<ul style="list-style-type: none"> ▪ Standardized processes for inspection scheduling to ensure consistent expectations and reduced confusion for the Customer. ▪ Single point of review of inspection results for the Customer to eliminate the need for the Customer to navigate multiple contacts in order to receive results. 	<p>Streamlining the inspection process will provide the Customer with consistent expectations and one source of truth for inspection scheduling and results.</p> <p>Beneficiaries:</p> <ul style="list-style-type: none"> ▪ Engineers ▪ Residential Building Contractors ▪ Homeowners 	See Section 3.6

2.1.2 Service: Issue Standard Permits

This section describes the Issue Standard Permits service, within the Simple Permitting Services Category. The naming convention “Standard” conveys to the Customer that these permits do not have a complex issuance process, particularly compared to those permits that are issued within the Development Services category (e.g., building permit). This service and its supporting Lifecycle Steps is outlined in the figure below.

Table 9. Issue Standard Permits

Future State Service Delivery Model - Services	Supporting Lifecycle Steps		
Category: Simple Permitting Services			
Service: Issue Instant Permits (No Review)			
Customer Objective: Apply for an Instant Residential Trade Permit	Application Processing	Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for an Instant Commercial Trade Permit	Application Processing	Permit Issuance	Inspection & Enforcement
Service: Issue Standard Permits			
Customer Objective: Apply for a Simple Residential Trade Permit	Application Processing	Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for a Simple Commercial Trade Permit	Application Processing	Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for a Sign Permit	Application Processing	Plan Review	Permit Issuance
Customer Objective: Apply for a Zoning Use Permit	Application Processing	Plan Review	Permit Issuance
Service: Issue Special Permits			
Customer Objective: Apply for a Special Event, Parade and/or Festival-related Permit	Application Processing	Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for a Tent Permit	Application Processing	Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for Other Temporary Permit Types	Application Processing	Permit Issuance	Inspection & Enforcement

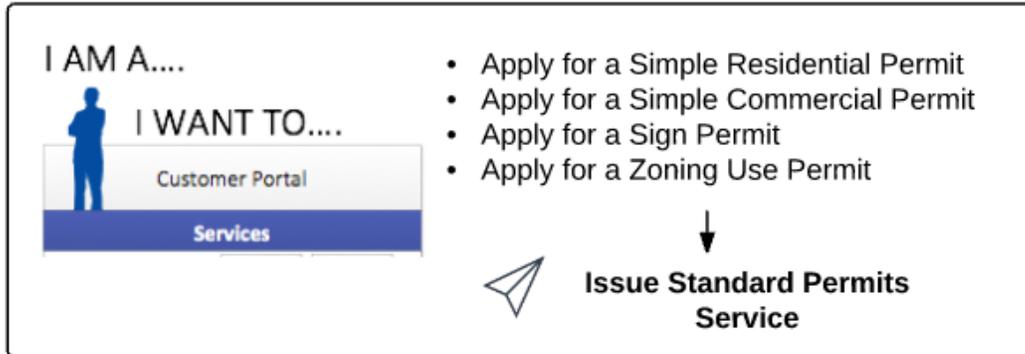
Future State Description

There are permit types that only require a simple compliance review prior to issuance. The term “compliance” review represents a review that is administrative in nature that is not complex or lengthy.

Examples of types of permits that could be issued by this service include:

- Residential permit types that only require a review to ensure there are no GIS/zoning restrictions on the property.
- Commercial permit types that require only a review of the scope of work submitted with the application. The review is to ensure that a sufficient description of the scope of work has been provided and to confirm that a formal plan review is not required.
- Sign Permits that require a review for compliance with sign regulations and approval of the application prior to issuance.
- Zoning Use Permits that require a review and approval of the application prior to issuance.

This joint City and County service will issue all permit types that only require a simple compliance review prior to issuance.



Customer Segments that would consume this service include:

- Homeowners
- Engineers
- Residential Building Contractors
- Contractors
- Owners/Developers
- Small Business Developers

*Customer Segments developed by Customer Service Solutions (CSS)

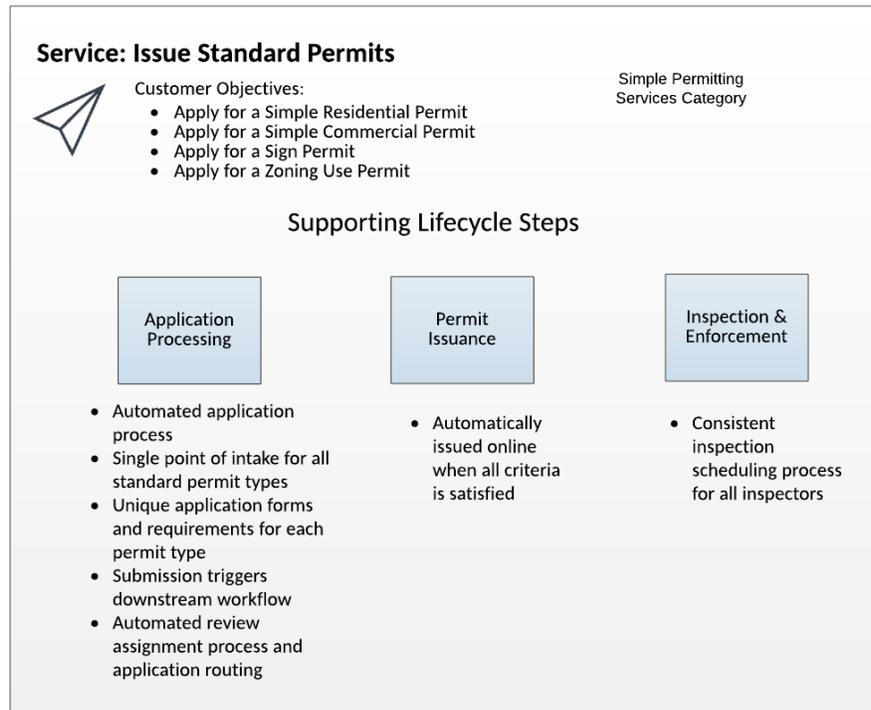
Upon submission of an application via the joint City/County online portal, and payment of required fees, the application is routed to a staff member's work queue in a system for review. Depending upon the permit type and the requirements for issuance, staff will perform a compliance review. This review will evaluate application completeness, compliance with requirements for approval, and/or a review of the statement of work to ensure no further review is needed.

Upon staff review and approval, the permit is systematically generated and can be printed online by the Customer. Generation of the permit may trigger one or more required inspections tracked in a system that the Customer may need to satisfy in the future to receive a final clearance document (e.g., Certificate of Occupancy) depending upon the requirements for the project and/or permit type.

No cross-departmental coordination is needed for this service, as a system will route the application to the required review staff (City or County) according to predefined and configured business rules for that permit type. The designated staff is solely responsible for making the decision to approve the application.

The service and its supporting Lifecycle Steps and business processes are highlighted below:

Figure 13. Issue Standard Permits Service - Supporting Lifecycle Steps



These Lifecycle Steps and supporting business processes are discussed in more detail in [Section 3](#).

An example of a project flowing through the service is illustrated below. Projects differ from each other, and not every alternate path is illustrated in the diagram, but with defined Lifecycle Steps and Business Processes, the track each project will follow is still predictable, and can be measured, managed, and communicated.

Figure 14. Issue Standard Permit Service - Potential Supporting Business Processes

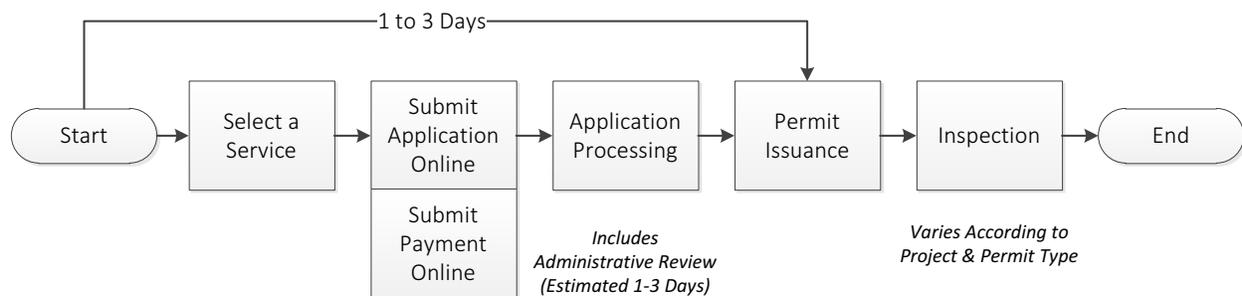


Figure 15. Technology Considerations to Support the Issue Standard Permit Service



Technology Considerations for Program 6: Establish Long-Term Permitting and Plan Review Application Strategy and Implement

- Consolidation of multiple online customer portals into one, single portal for all customers across all organizations.
- Single online payment gateway for all online transactions.
- Configurable solution that supports automated workflow and business rules.

Current State Description

Note: The current state description is based on information provided to Gartner as of June 2015.

The future state Issue Simple Permits service will consolidate multiple current state processes into one service for multiple permit types. The affected current state processes are described below:

- Commercial Technical Assistance Center (CTAC) Issued Permits – Permit applications are submitted through the County’s Contractor Online Portal and reviewed by County staff. Upon approval, the permit and placard can be printed out from the contractor dashboard once the permit is validated, usually within 1-3 days. The issuance process will stay the same in the future state, although the establishment of a joint City/County online portal is recommended.
- Residential Online Permitting – Permit applications are submitted through the County’s Contractor Online Portal and reviewed by County staff to determine if zoning or other approval is required. These permits can be issued within 24 hours (if no zoning approval is required). The issuance process will stay the same in the future state, although the establishment of a joint City/County online portal is recommended.
- Sign Permits – Customers submit paper sign permit applications to the City’s Neighborhood & Business Services department. The City reviews and approves/denies the application. Approved applications are placed in a bin for pickup by the County, who then data enters the application into POSSE. The approved paper applications are dropped back off to the City, who then charge the Customer’s account. Once their account is charged, the Customer knows that they can login to the County’s online portal to print their sign permit out online. To initiate the inspection request, the Customer must enter a 311 service request, or can call the City directly, since inspection requests are not automated. Within 1-3 days, inspections are performed by the City, who enter their inspection results into POSSE. This process will be automated in the future state and follow the standardized processes for application submission, issuance, and inspections. A joint City/County online portal is recommended.
- Zoning Use Permits – Customers submit zoning use permits in person to the City’s Neighborhood & Business Services department. The administrative review and issuance is typically performed in person, the same day. The Customer schedules inspections via telephone, and the City also performs inspections proactively. Although the in-person process can still be supported in the future state, this process should also be available online and should follow the standardized processes for application submission, issuance, and inspections

Table 10. Gap Analysis Between Current State and Future State Issue Standard Permit Service Delivery

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
Overall Issue Standard Permit Services	<ul style="list-style-type: none"> ▪ Multiple processes are in place to support various instant permit types, which can be confusing to Customers. ▪ Customers must research where to submit their projects, and figure out who to contact if they have questions. 	<ul style="list-style-type: none"> ▪ Consolidation of multiple online customer portals into one, single portal for all customers across all organizations. ▪ Automation of Sign permit and Zoning Use permit intake and application processing to offer a convenient alternative to paper-based and in-person applications. ▪ Standardization of application intake process to ensure a consistent experience for the Customer. ▪ Naming convention change. 	<p>Automating paper-based, in-person processes and standardizing the application intake process will provide the Customer with consistent expectations.</p> <p>Customers will no longer need to navigate multiple processes or have to research where/who to submit to.</p> <p>Beneficiaries:</p> <ul style="list-style-type: none"> ▪ Engineers ▪ Residential Building Contractors ▪ Homeowners 	<ul style="list-style-type: none"> ▪ Digitize and automate permit applications that are currently only offered for completion on paper and submission in person. (i.e., Sign permits, Zoning Use Permits) ▪ Configure workflow and existing user interfaces to ensure a consistent user experience. ▪ Consider consolidating existing multiple online portals into one comprehensive portal for all projects.
Application Processing	<ul style="list-style-type: none"> ▪ Multiple application submission points and processes for simple permits 	<ul style="list-style-type: none"> ▪ Transition to a single point of submission to reduce confusion for the Customer. 	<p>Streamlining the application intake and plan submittal process will simplify the Customer experience as they will no longer need to submit multiple applications to multiple jurisdictions or departments and thus potentially reduce overall cycle times.</p> <p>Beneficiaries:</p> <ul style="list-style-type: none"> ▪ Architects ▪ Engineers 	<p>See Section 3.2</p>

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
			<ul style="list-style-type: none"> ▪ Residential Building Contractors ▪ Homeowners ▪ Realtors/Brokers 	
Permit Issuance	N/A	No changes are proposed to the current process in place	N/A	N/A
Inspection & Enforcement	<ul style="list-style-type: none"> ▪ Inconsistent inspection scheduling processes across the City, County, and other agencies. 	<ul style="list-style-type: none"> ▪ Standardized processes for inspection scheduling to ensure consistent expectations and reduced confusion for the Customer. ▪ Single point of review of inspection results for the Customer to eliminate the need for the Customer to navigate multiple contacts in order to receive results. 	<p>Streamlining the inspection process will provide the Customer with consistent expectations and one source of truth for inspection scheduling and results.</p> <p>Beneficiaries:</p> <ul style="list-style-type: none"> ▪ Engineers ▪ Residential Building Contractors ▪ Homeowners 	See Section 3.6

2.1.3 Service: Issue Special Permits

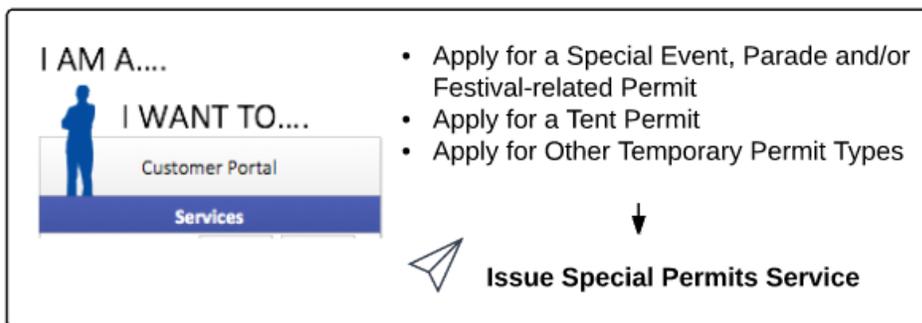
This section describes the Issue Special Permits Service, within the Simple Permitting Services Category. The naming convention “Special” conveys to the Customer that these permits are issued for a single instance/event and for a temporary period of time (e.g., one week). This service, and its supporting lifecycle steps, is outlined in the table below.

Table 11. Issue Special Permits

Future State Service Delivery Model - Services	Supporting Lifecycle Steps			
Category: Simple Permitting Services				
Service: Issue Instant Permits (No Review)				
Customer Objective: Apply for an Instant Residential Trade Permit	Application Processing	Permit Issuance	Inspection & Enforcement	
Customer Objective: Apply for an Instant Commercial Trade Permit	Application Processing	Permit Issuance	Inspection & Enforcement	
Service: Issue Standard Permits				
Customer Objective: Apply for a Simple Residential Trade Permit	Application Processing	Permit Issuance	Inspection & Enforcement	
Customer Objective: Apply for a Simple Commercial Trade Permit	Application Processing	Permit Issuance	Inspection & Enforcement	
Customer Objective: Apply for a Sign Permit	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Customer Objective: Apply for a Zoning Use Permit	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Service: Issue Special Permits				
Customer Objective: Apply for a Special Event, Parade and/or Festival-related Permit	Application Processing	Permit Issuance	Inspection & Enforcement	
Customer Objective: Apply for a Tent Permit	Application Processing	Permit Issuance	Inspection & Enforcement	
Customer Objective: Apply for Other Temporary Permit Types	Application Processing	Permit Issuance	Inspection & Enforcement	

Future State Description

“Special Permits” are temporary, short-term permits issued for one-time events. These permit types require a review by designated personnel prior to issuance. This joint City and County service will issue all special permit types that do not require staff review.



Upon submission of an application via the joint City/County online portal, and payment of required fees, the application is routed to a staff member’s work queue in a system for review. The type of special permit will drive the automated routing of the application to the appropriate reviewer’s queue. Depending upon the permit type and the requirements for issuance, staff will

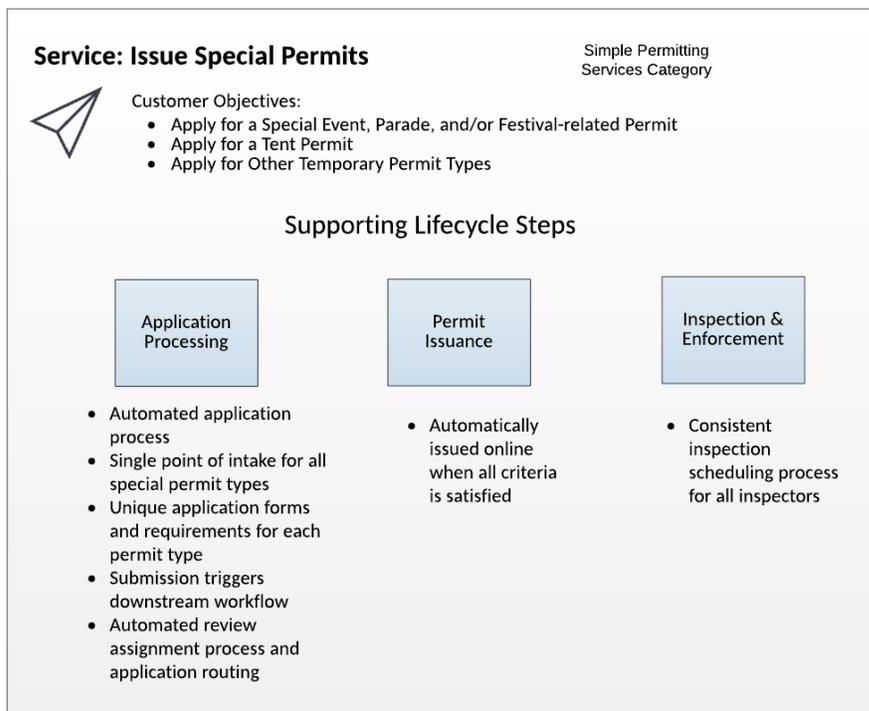
perform a compliance review. This review will evaluate application completeness and compliance with requirements for approval.

Upon staff review and approval, the permit is systematically generated and can be printed online by the Customer. Generation of the permit may trigger one or more required inspections tracked in a system that the Customer may need to satisfy in the future depending upon the requirements for the project and/or special permit type.

The typical Customer Segments that consume the services identified in the Future State Service Delivery Model (identified by CSS – Customer Solutions Services, Inc.) are not applicable for this service, as any Citizen may apply for these permit types regardless of their role on a development services project.

The service utilizes three major Lifecycle Steps, highlighted below:

Figure 16. Issue Special Permit Service - Supporting Lifecycle Steps



These Lifecycle Steps and supporting business processes are discussed in more detail in [Section 3](#).

An example of a project utilizing this service is illustrated below. Projects differ from each other, and not every alternate path is illustrated in the diagram, but with defined Lifecycle Steps and Business Processes, the track each project will follow is predictable, and can be measured, managed, and communicated.

Figure 17. Sample Project Supported by the Special Permit Service

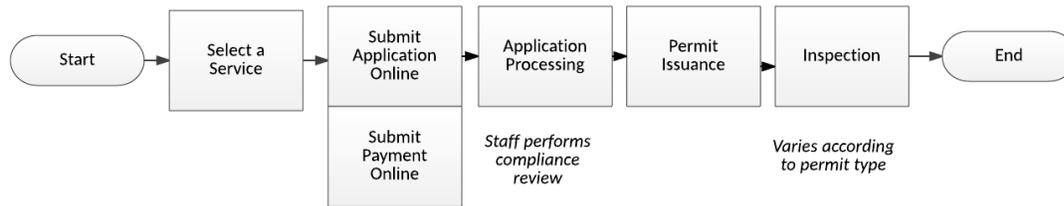


Figure 18. Technology Considerations to Support Special Permit Service



Technology Considerations for Program 6: Establish Long-Term Permitting and Plan Review Application Strategy and Implement

- Consolidation of multiple online customer portals into one, single portal for all customers across all organizations.
- Single online payment gateway for all online transactions.
- Configurable solution that supports automated workflow and business rules.

Current State Description

The City of Charlotte and Mecklenburg County host many events each year and for some events, permits are required to support the event. Permits can be related to temporary structures that are being erected, street closures, tent permits, etc. Depending on the permit type, as well as other criteria such as the duration of the event, reviews will need to be performed by the appropriate reviewing agency.

Currently, the Customer must research where to submit the application depending on who must review it. There are many different criteria that govern where the Customer needs to submit and there is not one consolidated source of truth for where a Customer should submit. Examples of the multiple processes in place and multiple intake points for applications are listed below:

- Applications can be submitted via meckpermit.com for those applications reviewed by the County, and there are 4 tracks for the Customer to follow depending upon the type of event
<http://charmeck.org/mecklenburg/county/LUESA/CodeEnforcement/Documents/Special%20Events%20Work%20Flow.pdf>.
- For special events, parades, and festivals that are held in the City of Charlotte, Customers can apply at <http://www.eventpermits.charlottenc.gov>.
- For tent permits, Customers download an application from the Charlotte Fire Department's website, and mail in the permit application and a check for payment - <http://charmeck.org/city/charlotte/Fire/Keeping%20You%20Safe/FirePreventionBureau/Pages/TentGuidelinesandPermittingRequirements.aspx>.

The Issue Special Permits Service provides an opportunity to consolidate these existing processes and intake points into one joint City and County service.

2.2 Zoning Services Category



The services within the Zoning category are related to processing Customer zoning requests that can require formal review by a governing body or internal administrative City review, depending upon the request type. Examples of zoning requests supported by this service category include rezoning, zoning appeals and variances, and historic district reviews.

These services are outlined in more detail in the following sections:

- Support Formal Review of Zoning Request
- Support Administrative Review of Zoning Request

The Zoning Services category is not inclusive of all zoning-related processes. Subdivision projects, and commercial and residential zoning plan reviews and inspections, are supported by services within the Development Services category. Issuance of zoning use and sign permits are supported by services in the Simple Permitting Services category.

For the purposes of the Zoning activities described in the Service Model, Gartner focuses on City-owned processes only. County Land Development provides services for zoning in the six Towns, the Towns' spheres of influence, and unincorporated Mecklenburg County. Plans may also be reviewed by the respective Town Planning Departments to make sure proposed developments meet the terms of the Towns' municipal planning and zoning ordinances and regulations, per the Town's individual requirements. Gartner recommends that if possible, the Towns' zoning processes be consolidated into the Service Delivery Model.

2.2.1 Service: Support Formal Review of Zoning Request

Zoning regulations are the rules that determine how parcels of land may be used. When owners want to develop or use their property in ways that do not conform to their current zoning regulations, they must contact the City for review and approval of their request (Note that rezoning may or may not lead to downstream lifecycle permitting and horizontal activities).

Depending on the nature of the request, it may need to be reviewed by a formal governing body (i.e. Charlotte City Council, Zoning Board of Adjustment, Historic District Commission) or it may be able to be addressed through an administrative review by the appropriate City designee (i.e. Zoning Administrator, Historic District staff). This service focuses on those requests that are addressed by a formal governing body.

The major components of the Support Formal Review of Zoning Request service is outlined in the figure below.

Table 12. Support Formal Review of Zoning Request

Future State Service Delivery Model - Services	Supporting Lifecycle Steps		
Category: Zoning Services			
Service: Support Formal Review of Zoning Request			
Customer Objective: Apply for Conventional Rezoning	Application Processing	Plan Review	Land Entitlement
Customer Objective: Apply for Conditional Rezoning	Application Processing	Plan Review	Land Entitlement
Customer Objective: Apply for Text Amendment	Application Processing	Plan Review	Land Entitlement
Customer Objective: Apply for Zoning Variances and Appeals	Application Processing	Plan Review	Land Entitlement
Customer Objective: Apply for Certificate of Appropriateness	Application Processing	Plan Review	Land Entitlement
Service: Support Admin. Review of Zoning Request			
Customer Objective: Apply for Admin. Amendment to an Approved Rezoning Plan	Application Processing	Plan Review	Land Entitlement
Customer Objective: Apply for Admin. Deviation of Zoning Ordinance	Application Processing	Plan Review	Land Entitlement
Customer Objective: Apply for Historic District Admin. Review	Application Processing	Plan Review	Land Entitlement

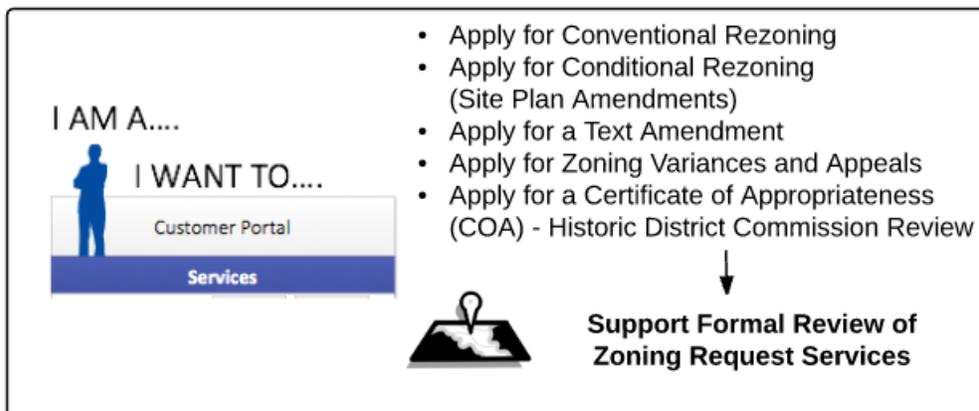
Future State Description

The zoning classification for a parcel is determined by the governing body for the property’s jurisdiction. The City (or Town) Planning Department coordinates between the Customer and the respective governing authority, to support the resolution of zoning-related requests. Historic District Commission (HDC) reviews are supported by City Zoning HDC staff.

Examples of zoning requests that must go through a formal review include the following:

- Conventional Rezoning, Conditional Rezoning, and Text Amendment requests are reviewed by the Zoning Committee and approved by City Council
- Requests for Zoning Variances and Appeals are reviewed and approved by the Zoning Board of Adjustment
- A residential or commercial project in a historic district may require City Historic District Commission review depending upon the characteristics of the project.

This joint City and County service will support all Customer zoning requests that require a formal review.



Customer Segments that would consume this service include:

- Homeowners
- Engineers
- Residential Building Contractors
- Contractors
- Owners/Developers
- Small Business Developers

*Customer Segments developed by Customer Service Solutions (CSS)

In the future state, Customers will be encouraged to apply for a Zoning request through the online portal. To help ensure a smooth application process, the Customer can optionally request a pre-submission meeting with staff. Upon submission of an application, and payment of required fees, the application is routed for a compliance review. A system should determine – upon predefined and configured business rules for that permit type – which staff (City vs. Town or County) to route the application to for the compliance review.

Once the case meets criteria indicating that it has been amended to the point of being “ready” for hearing, the Zoning request will be scheduled by staff for a hearing before the appropriate governing body. A system should support the scheduling process.

In preparation for the upcoming hearing, staff performs a number of activities, which can include research, analysis, mailing notices, developing a staff recommendation, and other steps. Additionally, staff supports the Customer during this time as they may have additional activities they need to complete prior to the hearing.

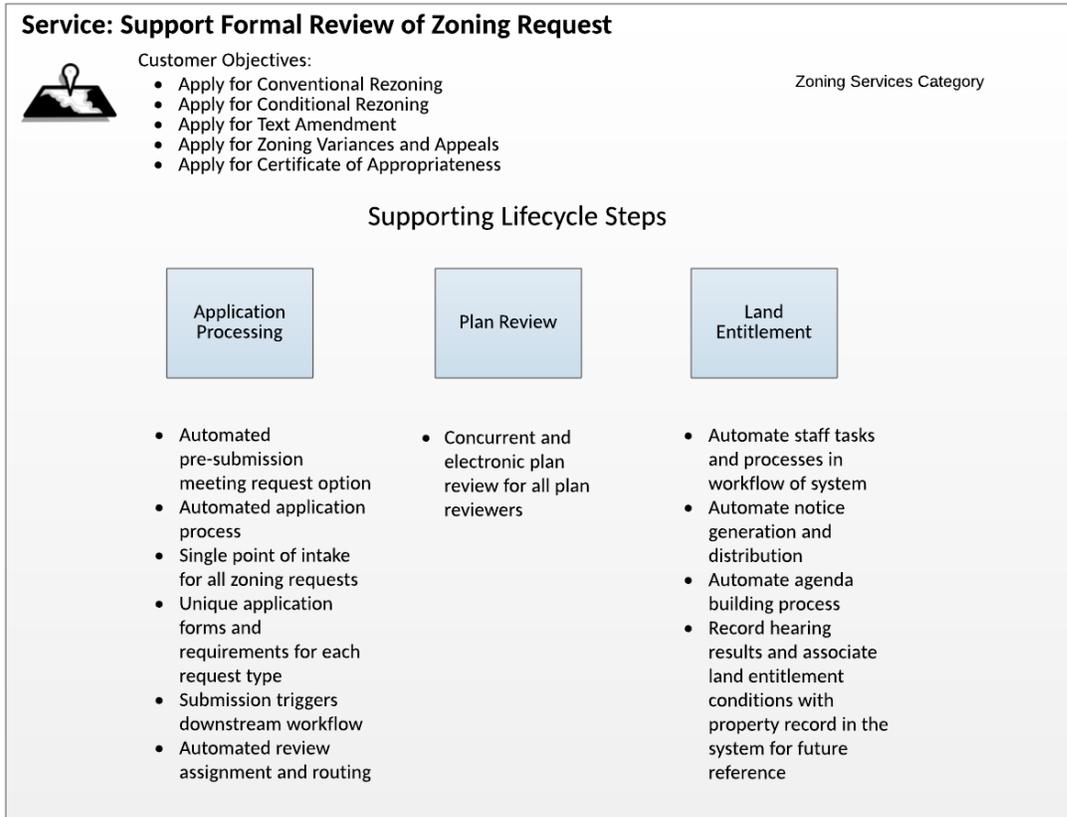
Decision is made by the governing body based on the submitted plan. Once the governing body conducts the hearing, staff is responsible for capturing the decision and associated condition(s) for the property, in a system for that property record. The submitted plan should also be associated with the property record. These zoning conditions, and supporting documentation, are then associated with the unique site/property record for future reference, and may be able to support automated zoning checks (discussed further in the Development Services section) depending upon the complexity of the condition. Staff then issues and systematically sends a notification of the hearing result to the Customer.

In some cases, the request may be deferred, before or after the agenda is finalized. For example, a case may be continued to the next agenda if the hearing is opened and then continued. The Customer may also request a postponement to the next scheduled hearing. This varies per project. The system will support the scheduling and rescheduling process.

By capturing the zoning conditions and associating them with the specific site location/ property record in a system, future building permit applications may be able to be systematically validated to ensure that the intended use of the property complies with the zoning ordinances. If it does not meet the conditions, then the Customer can be prompted to initiate a rezoning request, or other appropriate zoning application, at that time. This helps ensure that the Customer does not proceed too far down the road with a building development project without addressing the local ordinances governing site development. This is discussed further in the Development Services section.

The service and its supporting Lifecycle Steps and business processes are highlighted below:

Figure 19. Support Formal Review of Zoning Request Service - Supporting Lifecycle Steps



These Lifecycle Steps and their supporting business processes are discussed in more detail in [Section 3](#).

An example of a project flowing through the service is illustrated below. Projects differ from each other, and not every alternate path is illustrated in the diagram, but with defined Lifecycle Steps and Business Processes, the track each project will follow is still predictable, and can be measured, managed, and communicated.

Figure 20. Formal Review of Zoning Request - Potential Supporting Business Processes

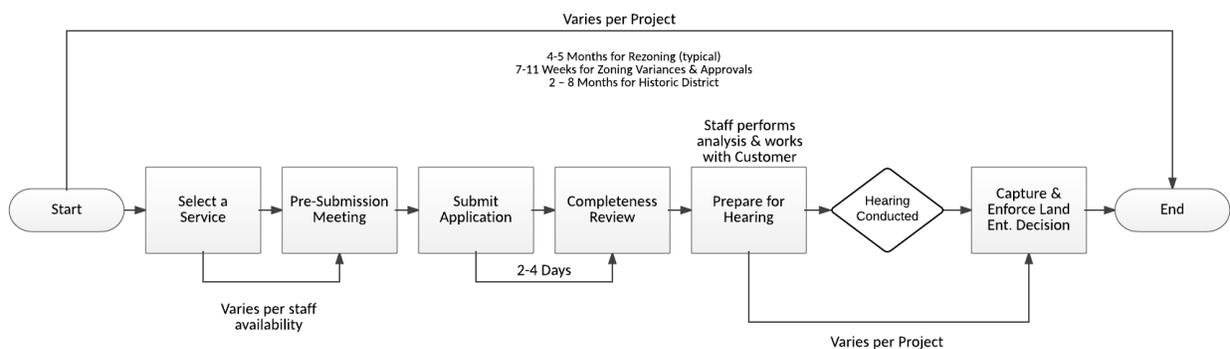


Figure 21. Technology Considerations to Support Formal Review of Zoning Request Service



Technology Considerations for Program 6: Establish Long-Term Permitting and Plan Review Application Strategy and Implement

- Consolidation of multiple online customer portals into one, single portal for all customers across all organizations.
- Single online payment gateway for all online transactions.
- Configurable solution that supports automated workflow and business rules.
- Continued use of agenda-building functionality to support zoning hearing process.
- Track zoning conditions at the parcel level, via property record data and/or GIS layers.

Current State Description

Note: The current state description is based on information provided to Gartner as of June 2015.

Currently the City’s Planning Department supports zoning activities related to rezoning (conventional rezoning, conditional rezoning, text amendments, and zoning appeals and variances) that must go through a formal review. The intake process occurs in person. Applications are submitted on paper, and supporting documentation (e.g., site plans) are provided on CD and in hard copy by the Customer. The department supports both the various governing bodies that conduct the hearing(s), as well as the Customer, throughout the process. Applications can be approved, denied, or continued (reviewed at a future hearing). At the time Gartner conducted current state interviews with the Planning Department, processes were manual and projects were managed using files on the shared network drive. However, the City had plans to transition to using the Accela system to automate the processes.

Historic District staff works with property owners and businesses in Charlotte’s designated historic districts to ensure that development and renovation occurs in a way that preserves the character of the neighborhoods. Applications for a Certificate of Appropriateness (COA) are submitted via email or in person. Projects are logged in the GIS Database and documents are stored in the HDC share drive in a folder under the assigned tracking number and property address. HDC staff prepares for the hearing and supports both the Historic District Commission and the Customer during the process. Upon approval a COA is written and signed (any associated documents are attached and stamped with an HDC logo to indicate approval). The final PDF is emailed to the Customer and City staff members, the project is closed in the GIS database, and a hardcopy of the COA and placard is mailed to the Customer. Applications can also be denied or continued (reviewed at a future meeting).

The future state service will provide the opportunity to automate the existing business processes, reducing dependence on paper forms and plans, and also provide a central repository for document storage rather than shared network drives.

Table 13. Gap Analysis Between Current State and Future State Support Formal Review of Zoning Request Service Delivery

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
Overall Support Formal Review of Zoning Request Services	<ul style="list-style-type: none"> ▪ Multiple processes are in place to support zoning requests, which can be confusing to Customers. ▪ Customers must research where to submit their projects, and figure out who to contact if they have questions. ▪ The majority of processes are manual. Shared drives are used to store project information. There are currently City initiatives underway to automate a number of the processes in Accela. 	<ul style="list-style-type: none"> ▪ Consolidation of multiple online customer portals into one, single portal for all customers across all organizations. ▪ Naming convention change. ▪ Automate zoning processes to improve cycle time and ensure accuracy and consistency ▪ Store zoning information against a property record for future reference and validation. 	<p>Automating paper-based, in-person land-entitlement processes will simplify the intake and review process by eliminating a dependence on paper forms.</p> <p>A centralized document management will provide a more secure and efficient repository than a shared network drive and ensure simple access to documents in the future.</p> <p>Customers will no longer need to navigate multiple processes or have to research where/who to submit to.</p> <p>Beneficiaries:</p> <ul style="list-style-type: none"> ▪ Engineers ▪ Residential Building Contractors ▪ Homeowners 	<ul style="list-style-type: none"> ▪ Digitize the zoning application to facilitate online submission and offer the ability to upload digital supporting documentation. ▪ Streamline disparate processes for zoning requests. ▪ Document processes in a customer-friendly manner and publish to facilitate customer research. ▪ Identify POCs for zoning request inquiries aligned with published processes for customers who may need additional information. ▪ Consolidate existing multiple online portals into one comprehensive portal for all projects.
Application Processing	<ul style="list-style-type: none"> ▪ The majority of zoning applications are submitted in person in CD and hard copy format. ▪ No online payment is currently available. 	<ul style="list-style-type: none"> ▪ Transition to an online application intake format to offer a convenient alternative to in-person submissions. ▪ Automation of application intake and processing across all 	<p>Digitization of zoning applications and automation intake process will simplify the Customer experience as they will no longer need to submit CDs and hard copies in person. Online payments along with online plan</p>	<p>See Section 3.2</p>

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
		Zoning applications improves consistency. <ul style="list-style-type: none"> ▪ Implement the ability to make payments online to offer a convenient alternative to in-person payments. 	submissions should improve the Customer experience and reduce cycle time Beneficiaries: <ul style="list-style-type: none"> ▪ Architects ▪ Engineers ▪ Residential Building Contractors ▪ Homeowners 	
Land Entitlement	<ul style="list-style-type: none"> ▪ Building an agenda and preparing for hearings can be a cumbersome and time consuming task for City Staff to print and consolidate all materials required for a hearing. There is an opportunity to automate this process through agenda-building software. ▪ Notice generation and other tasks are manual. ▪ Land conditions, which are the result of the hearings, are not tracked systematically or attached to a property record in a system. 	<ul style="list-style-type: none"> ▪ Tracking of outcome of hearing (e.g., land conditions) in the same system as building permitting may allow for automated zoning checks (when possible) against building permits submitted for the property. 	N/A – Improvements benefit internal staff	See Section 3.3
Plan Review	<ul style="list-style-type: none"> ▪ Plans and supporting documentation currently submitted in CD and hard copy format. 	<ul style="list-style-type: none"> ▪ Online submission for plans and other supporting documents to offer a convenient alternative to in-person 	Streamlining the plan submittal process to a single point will simplify the Customer experience as they will no longer need to	See Sections 3.2 and Section 3.4

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
	<ul style="list-style-type: none"> ▪ Files currently stored on shared network drives and not associated with property record. 	<ul style="list-style-type: none"> submissions of CDs and hard copies. ▪ Develop a single point of online submission for plans reducing burden on Customers to submit to different portals for different projects, and maintain multiple accounts. ▪ Central repository for plan information. Plan data associated with projects for that property record. 	<p>submit multiple plans to multiple jurisdictions or departments</p> <p>Beneficiaries:</p> <ul style="list-style-type: none"> ▪ Architects ▪ Engineers ▪ Residential Building Contractors ▪ Homeowners 	

2.2.2 Service: Administrative Review of Zoning Request

Some Zoning requests can be reviewed and approved by a City designee rather than having to go through the formal hearing process, referred to in this service as an “administrative review.”

The major components of the Support Administrative Review of Zoning Request service are outlined in the figure below.

Table 14. Support Administrative Review of Zoning Request

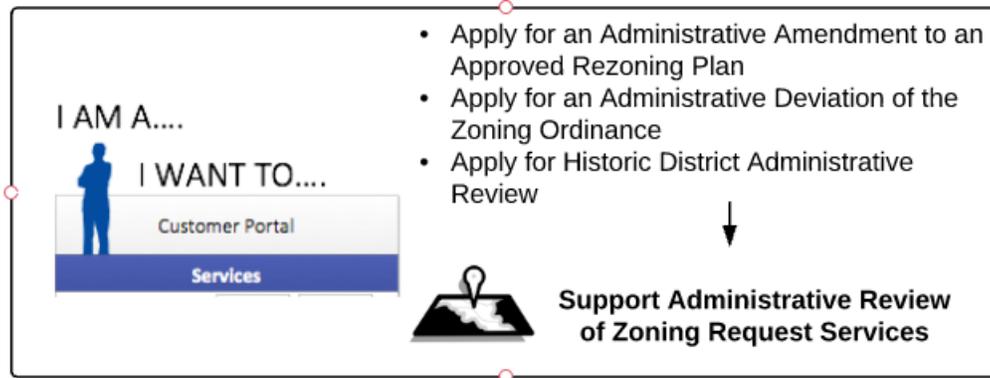
Future State Service Delivery Model - Services	Supporting Lifecycle Steps		
Category: Zoning Services			
Service: Support Formal Review of Zoning Request			
Customer Objective: Apply for Conventional Rezoning	Application Processing	Plan Review	Land Entitlement
Customer Objective: Apply for Conditional Rezoning	Application Processing	Plan Review	Land Entitlement
Customer Objective: Apply for Text Amendment	Application Processing	Plan Review	Land Entitlement
Customer Objective: Apply for Zoning Variances and Appeals	Application Processing	Plan Review	Land Entitlement
Customer Objective: Apply for Certificate of Appropriateness	Application Processing	Plan Review	Land Entitlement
Service: Support Admin. Review of Zoning Request			
Customer Objective: Apply for Admin. Amendment to an Approved Rezoning Plan	Application Processing	Plan Review	Land Entitlement
Customer Objective: Apply for Admin. Deviation of Zoning Ordinance	Application Processing	Plan Review	Land Entitlement
Customer Objective: Apply for Historic District Admin. Review	Application Processing	Plan Review	Land Entitlement

Future State Description

Examples of zoning requests that can be supported through an administrative review include the following:

- Minor changes to a previously approved conditional rezoning can be performed by the City Planning Director or designee.
- Administrative deviations from the zoning ordinance may be approved by the City Zoning Administrator.
- A Customer can request an administrative interpretation of the zoning ordinance, which is responded to by Planning Department staff.
- A residential or commercial project in a historic district may not require a Certificate of Appropriateness and review by the Commission, and plans can be reviewed by Historic District staff.

This joint City and County service will support all Customer zoning requests that require an administrative review.



Customer Segments that would consume this service include:

- Homeowners
- Engineers
- Residential Building Contractors
- Contractors
- Owners/Developers
- Small Business Developers

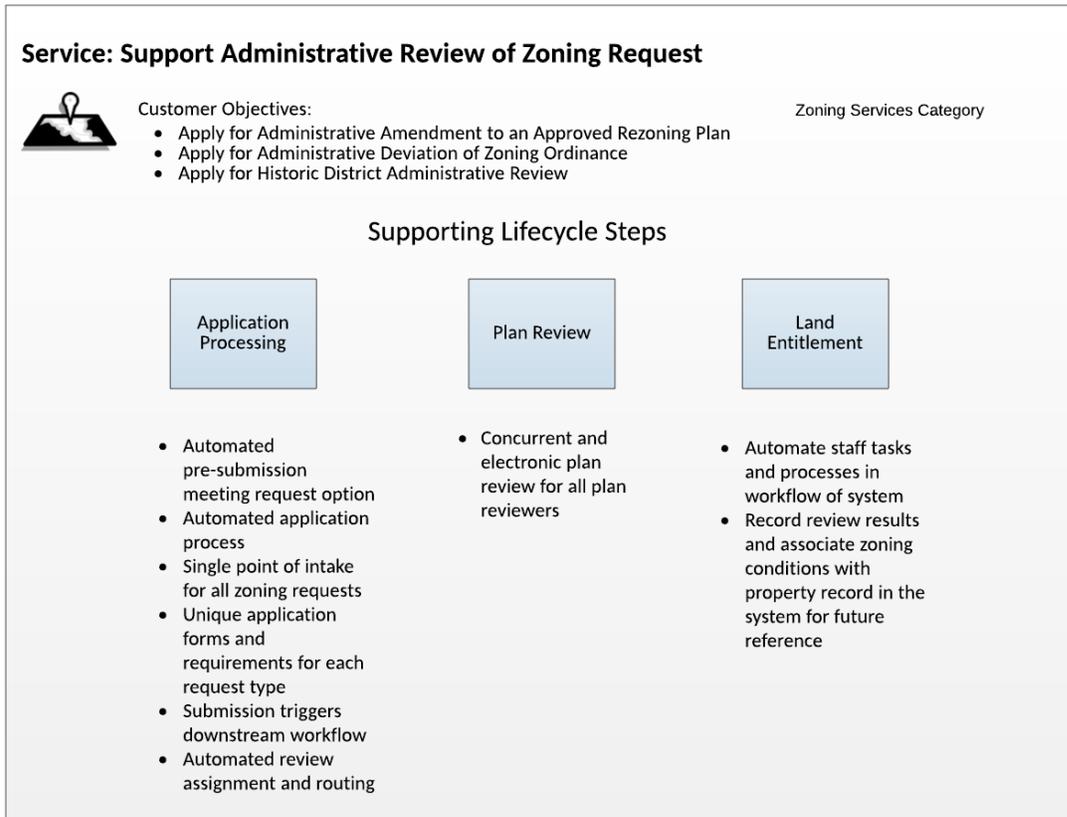
*Customer Segments developed by Customer Service Solutions (CSS)

In the future state, Customers will be encouraged to apply for a Zoning request through a joint City/County online portal. Upon submission of an application, and payment of required fees, the application is routed for a compliance review. A system should determine – upon predefined and configured business rules for that permit type – which staff (City vs. Town or County) to route the application to for the compliance review. Upon passing the compliance review, the request will be routed to the appropriate Zoning staff for review and decision. Staff captures the decision and condition(s) in a system. Staff then systematically generates a notification of the review result to the Customer.

By capturing the zoning conditions and associating them with a property record in the system, future building permit applications may be able to be systematically validated to ensure that the intended use of the property complies with the zoning ordinances. If it does not, then the Customer can be prompted to initiate a rezoning request, or other appropriate zoning application, at that time. This helps ensure that the Customer does not proceed too far down the road with a building development project without addressing the local ordinances governing site development. This is discussed further in the Development Services section.

The service and its supporting Lifecycle Steps and business processes are highlighted below:

Figure 22. Support Administrative Review of Zoning Request Service - Supporting Lifecycle Steps



An example of a project flowing through the service is illustrated below. Projects differ from each other, and not every alternate path is illustrated in the diagram, but with defined Lifecycle Steps and Business Processes, the track each project will follow is still predictable, and can be measured, managed, and communicated.

Figure 23. Administrative Review of Zoning Request - Potential Supporting Business Processes

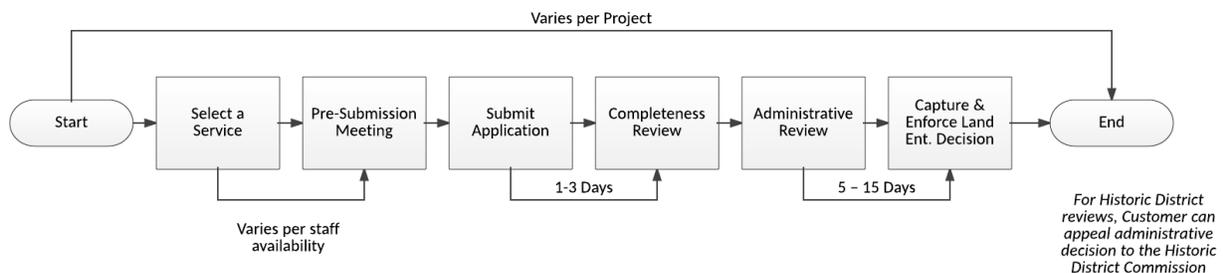


Figure 24. Technology Considerations to Support Administrative Review of Zoning Request Service



Technology Considerations for Program 6: Establish Long-Term Permitting and Plan Review Application Strategy and Implement

- Consolidation of multiple online customer portals into one, single portal for all customers across all organizations.
- Single online payment gateway for all online transactions.
- Configurable solution that supports automated workflow and business rules.
- Continued use of agenda-building functionality to support zoning hearing process.
- Track zoning conditions at the parcel level, via property record data and/or GIS layers.

Current State Description

Currently the City’s Planning Department supports zoning activities (administrative amendments to an approved rezoning plan, administrative deviation of the zoning ordinance) that go through an administrative review. There are different processes in place to support these requests:

- Administrative amendments to an approved rezoning plan are accepted online through the Accela Citizen Access Portal (ACA) and are managed in the Accela system by City staff. Upon approval Customers are emailed with a copy of the approved site plan.
- Administrative review of a deviation from the zoning ordinance was a manual process at the time of current state interviews with the City, although future plans included automating the process in Accela. In the current state, applications are submitted on paper, processes were manual and projects were managed using files on the shared network drive. The Customer is mailed a letter that contains the Zoning Administrator’s decision.

City Planning Department Historic District Commission (HDC) staff works with property owners and businesses in Charlotte’s designated historic districts to ensure that development and renovation occurs in a way that preserves the character of the neighborhoods. Applications are submitted via email or in person. Staff determines whether the request needs to go before the Historic District Commission or not. Other times Customers may be referred by the County and a COA is not needed – just HDC staff signoff. These two processes are described below:

- **Administrative Review / COA Needed:** Projects are logged in the GIS Database and documents are stored in the HDC share drive in a folder under the assigned tracking number and property address. Staff reviews applications and works with the Customer to resolve any conflicts. When plans are approved a COA is written and signed (any associated documents are attached and stamped with an HDC logo to indicate approval). The final PDF is emailed to the Customer and City staff members, the project is closed in the GIS database, and a hardcopy of the COA and placard is mailed to the Customer.
- **Administrative Review / No COA Needed:** Some projects do not require a COA, but do require a building permit (e.g., routine maintenance). Customers are directed by the County to bring a copy of the plans in person to the City’s office for review by Staff so that the hold can be resolved on their building permit. Historic District performs their review and after confirming the project does not require a COA, staff prepares an “application” which outlines the project and verifies a COA is not required. HDC Staff scans the application and emails it to City Zoning Staff, who then contact the County Project Coordinator with the results of their review and to release the hold in POSSE

(since City staff does not have access to POSSE). If a COA does turn out to be required, the Customer would be directed to begin that process.

The future state service will provide the opportunity to automate any existing manual business processes and workarounds, reduce dependence on paper forms and plans, and provide a central repository for document storage rather than shared network drives.

Table 15. Gap Analysis Between Current State and Future State Support Admin. Review of Zoning Request Service Delivery

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
Overall Support Admin. Review of Zoning Request Services	<ul style="list-style-type: none"> ▪ Multiple processes are in place to support zoning requests, which can be confusing to Customers. ▪ Customers must research where to submit their projects, and figure out who to contact if they have questions. ▪ The majority of processes are manual (Administrative Deviation process is automated in Accela). Shared drives are used to store project information. 	<ul style="list-style-type: none"> ▪ Consolidation of multiple online customer portals into one, single portal for all customers across all organizations. ▪ Naming convention change. ▪ Automate zoning processes to improve cycle time and ensure accuracy and consistency ▪ Store zoning information against a property record for future reference and validation. 	<p>Automating paper-based, in-person land-entitlement processes will simplify the intake and review process by eliminating a dependence on paper forms.</p> <p>A centralized document management will provide a more secure and efficient repository than a shared network drive and ensure simple access to documents in the future.</p> <p>Customers will no longer need to navigate multiple processes or have to research where/who to submit to.</p> <p>Beneficiaries:</p> <ul style="list-style-type: none"> ▪ Engineers ▪ Residential Building Contractors ▪ Homeowners 	<ul style="list-style-type: none"> ▪ Digitize the zoning application to facilitate online submission and offer the ability to upload digital supporting documentation. ▪ Streamline disparate processes for zoning requests. ▪ Document processes in a customer-friendly manner and publish to facilitate customer research. ▪ Identify POCs for zoning request inquiries aligned with published processes for customers who may need additional information. ▪ Consolidate existing multiple online portals into one comprehensive portal for all projects.
Application Processing	<ul style="list-style-type: none"> ▪ The majority of zoning applications are submitted in person in CD and hard copy format. ▪ No online payment is currently available. 	<ul style="list-style-type: none"> ▪ Transition to an online application intake format to offer a convenient alternative to in-person submissions. ▪ Automation of application intake and processing across all 	<p>Digitization of zoning applications and automation intake process will simplify the Customer experience as they will no longer need to submit CDs and hard copies in person. Online payments along with online plan</p>	<p>See Section 3.2</p>

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
		Zoning applications improves consistency. <ul style="list-style-type: none"> ▪ Implement the ability to make payments online to offer a convenient alternative to in-person payments. 	submissions should improve the Customer experience and reduce cycle time. Beneficiaries: <ul style="list-style-type: none"> ▪ Architects ▪ Engineers ▪ Residential Building Contractors ▪ Homeowners 	
Land Entitlement	<ul style="list-style-type: none"> ▪ Land conditions, which are the result of the hearings, are not tracked systematically or attached to a property record in a system. 	<ul style="list-style-type: none"> ▪ Tracking of outcome of hearing (e.g., land conditions) in the same system as building permitting may allow for automated zoning checks (when possible) against building permits submitted for the property 	N/A – Improvements benefit internal staff	See Section 3.3
Plan Review	<ul style="list-style-type: none"> ▪ Plans and supporting documentation currently submitted in CD and hard copy format. ▪ Files currently stored on shared network drives and not associated with property record. 	<ul style="list-style-type: none"> ▪ Online submission for plans and other supporting documents to offer a convenient alternative to in-person submissions of CDs and hard copies. ▪ Develop a single point of online submission for plans reducing burden on Customers to submit to different portals for different projects, and maintain multiple accounts. 	Streamlining the plan submittal process to a single point will simplify the Customer experience as they will no longer need to submit multiple plans to multiple jurisdictions or departments Beneficiaries: <ul style="list-style-type: none"> ▪ Architects ▪ Engineers ▪ Residential Building Contractors ▪ Homeowners 	See Sections 3.2 and Section 3.4

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
		<ul style="list-style-type: none"> ▪ Central repository for plan information. Plan data associated with projects for that property record. 		

2.3 Development Services Category



The services within the Development Services category include plan review and inspection services related to residential, commercial, and subdivision development projects. The service provided depends on the project type and project complexity.

These services are outlined in more detail in the following sections:

- Support Subdivision Project
- Support Standard Residential Project
- Support Standard Commercial Project
- Support Complex Commercial Project

2.3.1 Service: Support Subdivision Project

This section describes the Support Subdivision Project services, within the Development Services Category. A Customer's proposal to subdivide land into two or more lots must be approved by the appropriate governing bodies before the actual dividing of land and construction can begin. This service supports the application intake and plan review processes for subdivision projects, and may also include permitting and inspections for some projects, as well, depending on the project scope.

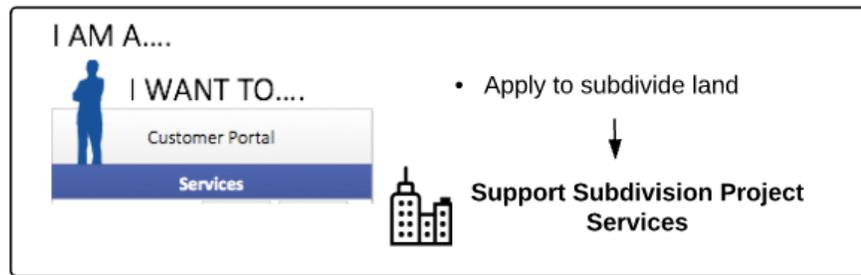
The major components of the Support Subdivision Project service are outlined in the figure below.

Table 16. Support Subdivision Project

Future State Service Delivery Model - Services	Supporting Lifecycle Steps			
Category: Development Services				
Service: Support Subdivision Project				
Customer Objective: Apply to Subdivide Land	Application Processing	Plan Review	<i>May Need: Permit Issuance</i>	<i>May Need: Inspection & Enforcement</i>
Service: Support Residential Project				
Customer Objective: Submit Standard Residential Project	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Customer Objective: Submit Townhouse Project	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Customer Objective: Submit Master Plan Project	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Service: Support Standard Commercial Project				
Customer Objective: Submit Small Commercial Project	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Customer Objective: Submit Large Commercial Project	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Service: Support Complex Commercial Project				
Customer Objective: Submit "Mega" Commercial Project (High Rise, Large Schools, Malls, Large Mix Use Project, Airports, Stadiums, Waste Water Treatment Plants, Arenas)	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Customer Objective: Submit "Hybrid/HCDT" Commercial Project (Use 3D computer modeling; example: Hospital)	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement

Future State Description

This joint City and County service will support all Customer requests to subdivide land.



Customer Segments that would consume this service include:

- Homeowners
- Engineers
- Residential Building Contractors
- Contractors
- Owners/Developers
- Small Business Developers

*Customer Segments developed by Customer Service Solutions (CSS)

In the future state, Customers will be encouraged to submit a subdivision proposal through a joint City/County online portal. To help ensure a smooth application process, a Customer may optionally request a pre-submission meeting.

Submission of the initial application should include the Sketch Plan and associated fees. The sketch plan is an informal plan submitted for review before the actual preliminary plan is formally submitted.

The application would be routed for a compliance review. A system should determine – upon predefined and configured business rules for that application type – which staff (City vs. Town or County) to route the application to for the compliance review, according to the site location and its jurisdiction.

Upon passing the compliance review, the Sketch Plan will be routed to the appropriate plan reviewers for review and decision. Again, the plan reviewers are assigned automatically according to business rules, and provide feedback to the Customer used to develop the preliminary plan.

The submission and plan review processes described above repeats for the next step, submission of the Preliminary Plan, which shows details of the street construction, lot layout, storm drains, creeks, and adjacent properties. Reviewers may include the Planning Department, Environmental Health Department and the City or County engineering Departments, and others as needed, depending on the plan.

Upon review and approval of the preliminary plan by each reviewer, construction of streets and storm drainage can begin at that time. Depending on the developer's objectives for their project, if they choose to develop streets, driveways, and sidewalks within a subdivision, these items can have associated permitting and inspection processes.

The record map (Final Plat) is submitted by the Customer to the Planning Department through the same initial submission process described above. The map shows exact lot dimensions, street and sewer right-of-way locations, public storm drainage easements, and other information necessary to support deed and title work. The final plat goes through a review process, similar to that described above, where required reviewers (e.g., City or County engineering department)

review and approve the record map. The Planning Department then gives the Customer official approval to record the map. The final map is recorded with the Register of Deeds office by the Customer. Following recordation, the Customer can apply for a building permit and construction can begin on the land. However, subdivision does not always lead to vertical construction and a customer’s objective may be to simply divide land. Recordation may also trigger the Customer to initiate the bond process.

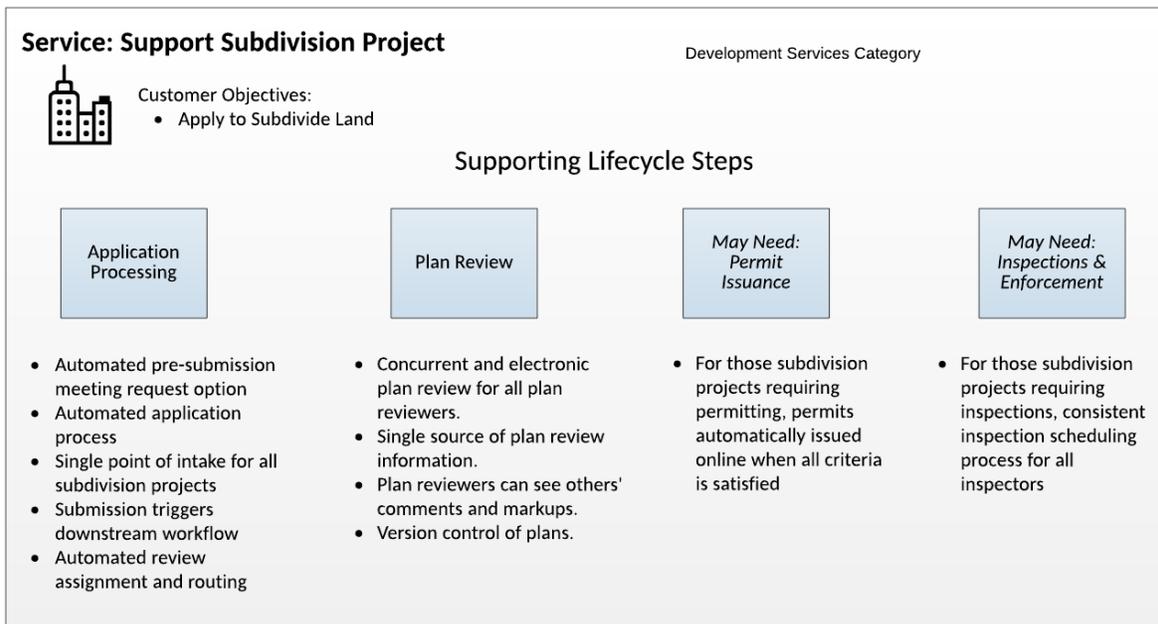
Both the City and the County/Towns administer bond programs for subdivision development, which allows developers and builders the opportunity to record subdivision plats and begin real estate transactions in the absence of completed required public improvements, while ensuring the completion of those required public improvements occur within a defined timeline after the initial surety posting (e.g., two years). Bond amounts are estimated by the City or County and posted by the Customer. Over time, bonds can be released, reduced, or renewed upon request by the Customer and subsequent evaluation by the City or County. The bond process should be automated, all timelines and restrictions associated with the plat record, and tracked and enforced accordingly. It is Gartner’s understanding that bond processes are currently automated in the City’s permitting systems.

If a reviewing agency is not in the system its review should still be tracked in a system and monitored.

Gartner recommends that for eligible customer types and projects in the future state, assignment of a Project Advocate could provide a single point of contact to guide customers through the appropriate process and assist in communication with the various City, County, and other agency actors that the Customer must interact with to successfully achieve their objectives. The Project Advocate could be responsible for monitoring the response time of NC DOT and follow up with them if they are close to missing their deadline, and also be responsible for logging the results of the NCDOT review in the system.

The service and its supporting Lifecycle Steps and business processes are highlighted below:

Figure 25. Support Subdivision Project Services - Supporting Lifecycle Steps



An example of a project flowing through the service is illustrated below. Projects differ from each other, and not every alternate path is illustrated in the diagram, but with defined Lifecycle Steps and Business Processes, the track each project will follow is still predictable, and can be measured, managed, and communicated.

Figure 26. Subdivision Project Service – Potential Supporting Business Processes

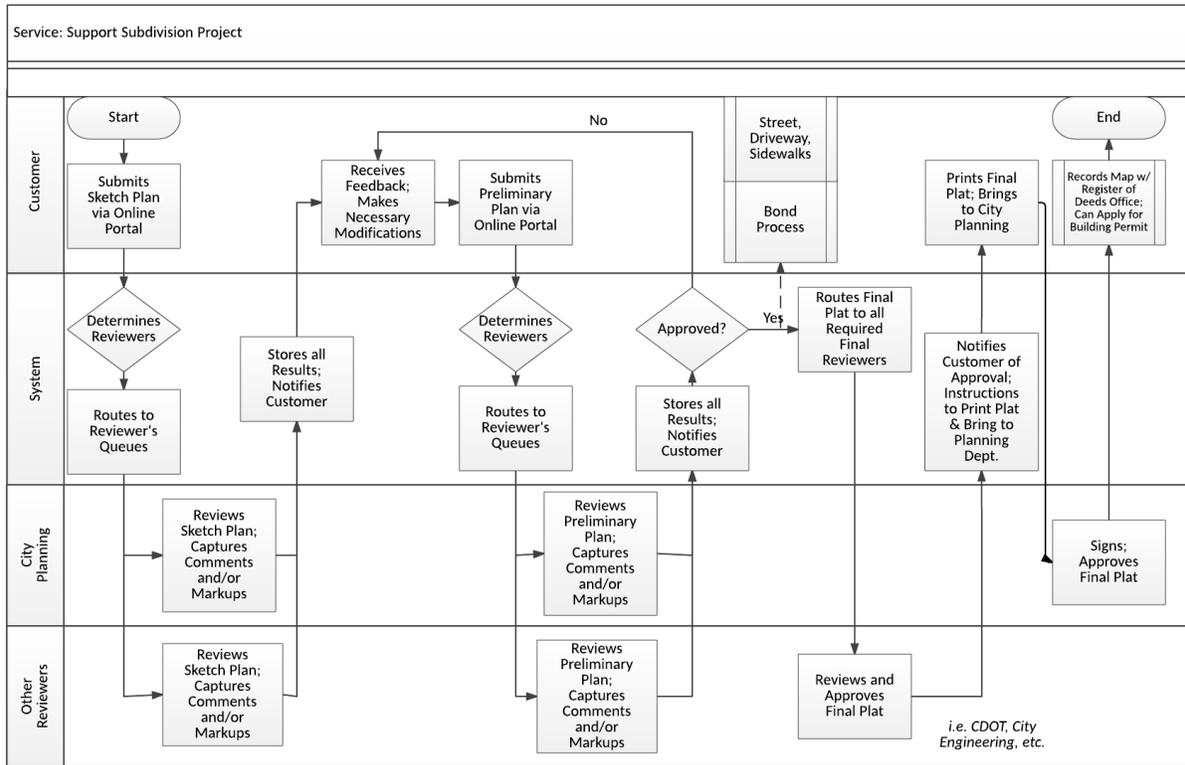


Figure 27. Technology Considerations to Support Subdivision Project Service



Technology Considerations for Program 6: Establish Long-Term Permitting and Plan Review Application Strategy and Implement

- Consolidation of multiple online customer portals into one, single portal for all customers across all organizations.
- Single online payment gateway for all online transactions.
- Configurable solution that supports automated workflow and business rules.
- One electronic plan review solution for all plan reviewers that enables concurrent plan review, version control, and provides a single source of truth for plan review information.
- Elimination of paper plan review.

Current State Description

Note: The current state description is based on information provided to Gartner as of June 2015.

Currently, for projects within the City of Charlotte’s jurisdiction, the City’s Planning Department is responsible for the review and approval of subdivision projects. The associated applications

and reviews are managed within the Accela system. Plans are submitted electronically by Customers (referred to as the “E-Plan” process) through the Accela Citizen Access (ACA) portal, and reviews are performed by City subdivision reviewers electronically using the Accela system, which leverages the Adobe Acrobat plan markup tool.

During the review process for both sketch plans and preliminary plans, there are some participating reviewing agencies who do not operate within the Accela system. The Customer submits paper copies to those reviewers, separately from their ACA submission. Once they have finished their review, the City holds an internal, joint meeting where these reviewers provide their feedback. The City is responsible for consolidating all feedback and providing it to the Customer.

For projects within the Towns’ jurisdictions (outside of the City’s jurisdiction), the Towns’ planning departments and the County’s Land Development staff must review and approve subdivision applications. The County and Towns execute similar major business process steps (i.e. sketch plan submission and review, preliminary plan submission and review, final plat review and recording), however, the timeframes for review differ, and the County and Towns use the Electronic Plan Management (EPM) system instead of Accela.

Online payments are not currently available for Customers through the City’s Accela system, nor the County’s EPM system.

Table 17. Gap Analysis Between Current State and Future State Support Subdivision Project Service Delivery

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
Overall Support Subdivision Project Services	<ul style="list-style-type: none"> ▪ Pain points are business process related (see below). 	N/A	N/A	<ul style="list-style-type: none"> ▪ Consolidate existing multiple online portals into one comprehensive portal for all residential projects. ▪ Setup subdivision plan review in system: ▪ Application Form ▪ Routing Rules ▪ Plan Reviews Required
Application Processing	<ul style="list-style-type: none"> ▪ Multiple submittal points for Customers. Customers must submit to ACA, as well as hard copy plans to NCDOT, Charlotte Water, and Charlotte Fire. ▪ No online payment is currently available. 	<ul style="list-style-type: none"> ▪ Transition to an online application intake format to offer a convenient alternative to in-person submissions. ▪ Implement the ability to make payments online to offer a convenient alternative to in-person payments. 	<p>Streamlining the application intake and plan submittal process will simplify the Customer experience as they will no longer need to submit multiple applications to multiple jurisdictions or departments and thus potentially reduce overall cycle times. Online payments along with online plan submissions should improve the Customer experience and reduce cycle time.</p> <p>Beneficiaries:</p> <ul style="list-style-type: none"> ▪ Architects ▪ Engineers ▪ Residential Building Contractors ▪ Homeowners 	See Section 3.2

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
Plan Review	<ul style="list-style-type: none"> ▪ The City completes their review within 20 days, while NCDOT operates in a 30-day plan review cycle, which delays the response time to the Customer. ▪ The City facilitates a review meeting with all reviewers to collect feedback. City staff then has to enter and scan all feedback into Accela, since not all reviewers work in Accela. 	<ul style="list-style-type: none"> ▪ ¹Requiring these agencies to use the selected technology solution, or implement a workaround to have their data entered into the system ▪ Consider choosing a technology solution that has a seamless integration between the permitting and plan review solution to ▪ Improvements may be limited if all reviewing agencies do not transition to an electronic plan review process, and do not agree to reduce their plan review duration. 	<ul style="list-style-type: none"> ▪ Streamlining the plan submittal process to a single point will simplify the Customer experience as they will no longer need to submit multiple plans to multiple jurisdictions or departments and thus potentially reduce overall cycle times. <p>Beneficiaries</p> <ul style="list-style-type: none"> ▪ Architects ▪ Engineers ▪ Residential Building Contractors ▪ Homeowners 	See Section 3.4

¹ **Note:** These issues are due to current technology restrictions and decisions, and should be addressed as part of Program 6.

2.3.2 Service: Support Residential Project

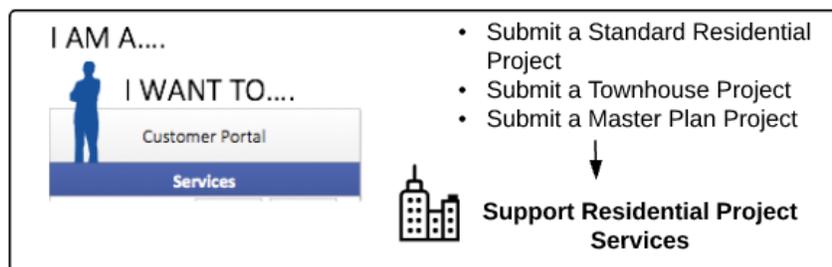
The Support Residential Project service, within the Development Services category, provides plan review and inspection services for residential projects. The service and its supporting Lifecycle Steps are highlighted below.

Table 18. Support Residential Project

Future State Service Delivery Model - Services	Supporting Lifecycle Steps			
Category: Development Services				
Service: Support Subdivision Project				
Customer Objective: Apply to Subdivide Land	Application Processing	Plan Review	May Need: Permit Issuance	May Need: Inspection & Enforcement
Service: Support Residential Project				
Customer Objective: Submit Standard Residential Project	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Customer Objective: Submit Townhouse Project	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Customer Objective: Submit Master Plan Project	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Service: Support Standard Commercial Project				
Customer Objective: Submit Small Commercial Project	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Customer Objective: Submit Large Commercial Project	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Service: Support Complex Commercial Project				
Customer Objective: Submit "Mega" Commercial Project (High Rise, Large Schools, Malls, Large Mix Use Project, Airports, Stadiums, Waste Water Treatment Plants, Arenas)	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Customer Objective: Submit "Hybrid/HCDT" Commercial Project (Use 3D computer modeling; example: Hospital)	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement

Future State Description

The Support Residential Project service, within the Development Services category, will be one joint service provided by both the City and the County to accommodate all residential projects.



Customer Segments that would consume this service include:

- Architects
- Engineers
- Residential Building Contractors
- Contractors
- Owners/Developers
- Homeowners

The Customer will be encouraged to submit their application for the project through a joint City/County online portal. A customized application will be provided for each residential project type. For example, there would be an application type for a Master Plan residential project where the Customer would be required to enter their master plan number, which would not be included on the other application types.

Application submittal will trigger a few processes. First, the system will perform an automated zoning check (when possible), which verifies that the intended use of the building complies with the zoning ordinances for that property. It can also check for other conditions, such as a historical district or floodplain, which will trigger other requirements for the project that the Customer will need to address either at application submission, or later on in the project lifecycle, according to business rules. If the intended use is not compliant with the conditions attached to the parcel record, then the Customer will be prompted to initiate a zoning request (see [Zoning Services](#) section).

Once the Customer finishes the application process and submits their residential project application through the online portal, the system will route the application for compliance review. A system should determine – upon predefined and configured business rules for that application type – which staff to route the application to for the compliance review. Once the application is approved for completeness, the system will generate the required reviews that must be satisfied in order for the Customer to receive their building permit. This list of required reviews will be a checklist that the Customer can follow to know what plans and other supporting documentation he or she must submit.

Once the Customer submits a set of plans or a document type to satisfy a review type on the checklist, a system should route the files to the designated reviewer(s) work queue. Required reviewers will be configured in the system according to business rules and enforced by workflow in a system. It is recommended that all participating reviewers be users of one system and all plan review comments and markup occur within one system. A system should automatically route the plans to the assigned reviewers, reducing the need for multiple submissions by the Customer. Further, plan review results are also available in one place and plan review status is comprehensive of all plan reviewers involved.

If a reviewing agency is not in the system (for example, the North Carolina Department of Transportation (NCDOT) is expected to continue a manual process) its review should still be tracked in a system and monitored, as the City does now in Accela.

In the future state, Gartner recommends that for eligible customer types and projects, assignment of a Project Advocate could provide a single point of contact to guide customers through the appropriate process and assist in communication with the various City, County, and other agency actors that the Customer must interact with to successfully achieve their objectives. The Project Advocate could be responsible for monitoring the response time of NC DOT and follow up with them if they are close to missing their deadline, and also be responsible for logging the results of the NCDOT review in the system.

Once the checklist has been satisfied, the associated permit(s) can be issued systematically. Issuance of the permits triggers required inspections that must be performed and resulted in a system before final clearance documentation (e.g., Certificate of Occupancy) can be issued systematically. When the Customer is ready for an inspection to occur, the Customer will schedule the inspection request through the online portal. Inspections will be assigned, performed, and resulted via the standardized inspection processes outlined in the [Inspection Business Process section](#).

Once all required inspections have been satisfied, the CO and/or other document(s) will be posted to the online portal for the Customer to print, and will be saved to the project’s record in a system.

The service and its supporting Lifecycle Steps and business processes are highlighted below:

Figure 28. Service Support Residential Project - Supporting Lifecycle Steps



An example of a project flowing through the Support Residential Project service is provided below. Please note that this is an example and there are many possible alternate paths a project may take that are not depicted here. However, because the component pieces to deliver the service - the Lifecycle Steps and Business Processes – are defined, the unique path the project follows will be based on defined units that can be measured, managed, and clearly communicated.

This illustration is provided to show how individual business processes within the lifecycle steps identified on the left hand side of the diagram, come together to support the service.

Figure 29. Example Project Supported by the Support Residential Project Service

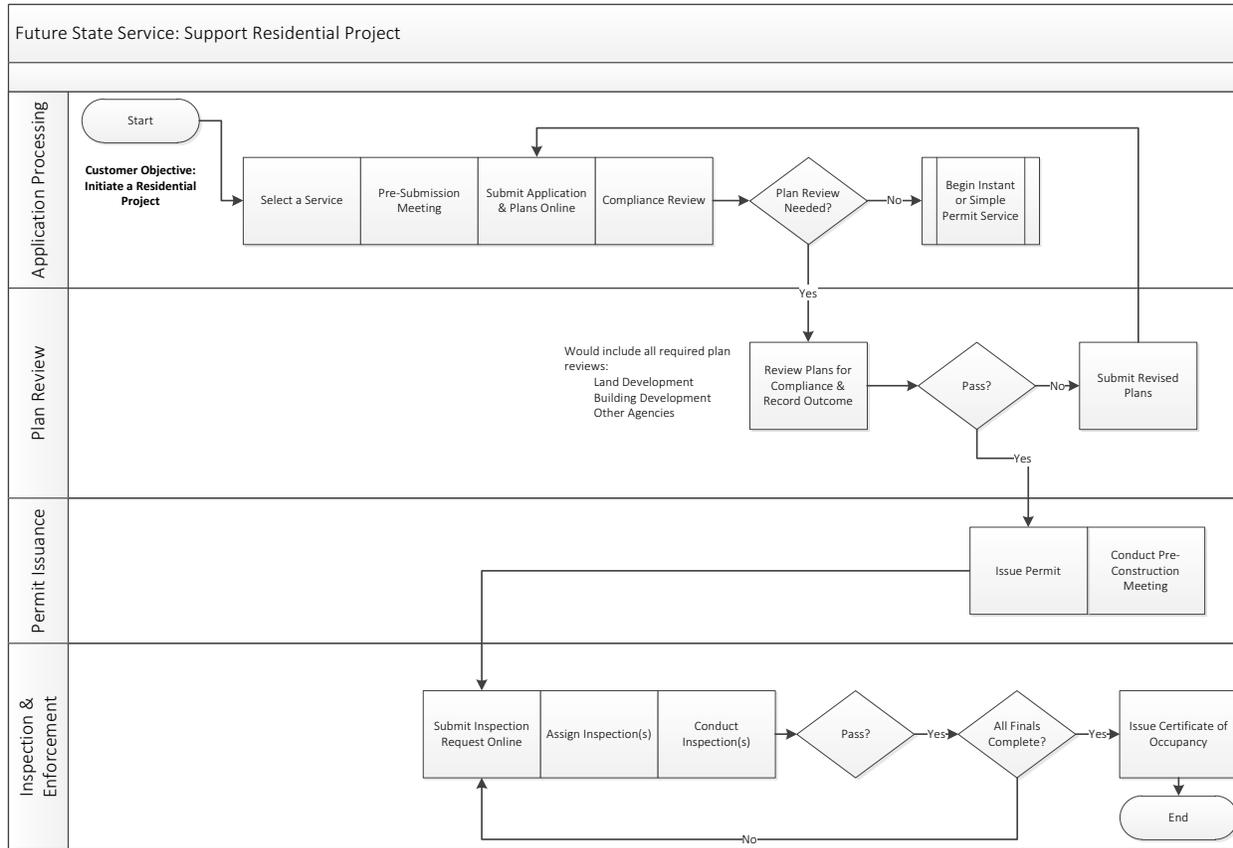


Figure 30. Technology Considerations to Support the Residential Project Service



Technology Considerations for Program 6: Establish Long-Term Permitting and Plan Review Application Strategy and Implement

- Consolidation of multiple online customer portals into one, single portal for all customers across all organizations.
- Single online payment gateway for all online transactions.
- Configurable solution that supports automated workflow and business rules.
- Track land entitlement conditions at the parcel level, via property record data and/or GIS layers.
- One electronic plan review solution for all plan reviewers that enables concurrent plan review, version control, and provides a single source of truth for plan review information.
- Elimination of paper plan review.

Current State Description

Note: The current state description is based on information provided to Gartner as of June 2015.

For residential projects, the County’s Residential Technical Assistance Center (RTAC) performs building code plan review and approval. The residential project will have an associated zoning

review, which is performed by the respective zoning agency designated for the jurisdiction in which the project is located. For example, if the project is within the City's jurisdiction the review is performed by the City's Neighborhood & Business Services department. Some of the towns require their zoning reviews to be submitted locally and completed before the County can process the building permit application (i.e. Huntersville, Cornelius and Davidson).

The County has different business processes to support different types of residential projects, with multiple systems supporting the processing of the applications and review of the associated plans. These processes include (1) standard residential project review, (2) townhouse review, and (3) residential master plan review for Raleigh homebuilders, known as the Residential E-Plan Review Process.

- Standard residential projects are submitted by the Customer through the County's online portal via a contractor or homeowner login, which inserts the application into the County's POSSE system where it is managed going forward. Both the City (or Town, if applicable) and the County capture their review results within POSSE, conduct their plan reviews concurrently, and work within the same prescribed review cycle period, which helps streamline the process.
- Townhouse plan review occurs manually due to the townhouse plan review type not currently being set up in POSSE. Customers bring in paper plans and a Coordinator sets up a project in POSSE with associated plan review tasks, but the plan review still occurs on paper. Results are data entered into POSSE by the various staff. If a townhouse project is part of a master plan project, the submittal can be done via the Residential E-Plan Review Process, outlined below.
- Master Plan projects are currently limited to residential homebuilders in the City of Raleigh. These residential homebuilders, who build the same models of homes over and over, have the opportunity to create an electronic residential "master plan", which eliminates the need for duplicate plan reviews with the County – known as the Residential E-Plan Review Process. The homebuilder submits their model plans through the County's E-Plan website: <http://www.e-plan-nc.org>. Plans and related communication occur within E-Plan and once the master plan is reviewed the homebuilder receives an E-Plan Master Plan Number via email. Going forward, the homebuilder follows the standard residential process (submits application via the online dashboard, which links to POSSE), but includes their E-Plan # with the application, to bypass the County's plan review. The Customer must still submit the zoning-related documentation that is specific to the project's unique location. The designated zoning agency performs their review, reviewing the zoning documentation and E-Plan system if needed, and captures their review results within POSSE.

For all processes (Standard Residential, Townhouse, and Master Plan), a permit is automatically issued in POSSE when all criteria are met, and the Customer can print the permit online or pick it up in person at the County office. Payment can be made through a preauthorized account, or Customers can "pay as they go" periodically throughout the project as milestones are reached. The Customer coordinates with the City, County and other agencies to schedule the required inspections, working towards the final Certificate of Occupancy or Certificate of Compliance.

The Customer may also need to submit separately with other agencies (e.g., utility companies) through their own individual submittal and review processes, and Customers are responsible for identifying and coordinating those reviews. Those reviews are enforced through holds in POSSE that must be cleared before a permit can be issued.

Table 19. Gap Analysis Between Current State and Future State Residential Project Service Delivery

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
Overall Residential Project Services	<ul style="list-style-type: none"> ▪ Multiple processes are in place to support various residential project types, which can be confusing to Customers. ▪ Customers must research where to submit their projects, and figure out who to contact if they have questions. 	<p>Given that the City and the County collaborate and work within the same process framework for residential projects, the gap between the current state and the future state is not large. Improvements include the following:</p> <ul style="list-style-type: none"> ▪ Consolidation of multiple processes to support residential projects into one process that supports multiple project types 	<p>Customers will no longer need to navigate multiple processes or have to research where/who to submit to.</p> <p>Beneficiaries:</p> <ul style="list-style-type: none"> ▪ Architects ▪ Engineers ▪ Residential Building Contractors ▪ Homeowners ▪ Realtors/Brokers 	<ul style="list-style-type: none"> ▪ Consolidate existing multiple online portals into one comprehensive portal for all residential projects. ▪ Setup townhouse plan review in system: ▪ Application Form ▪ Routing Rules ▪ Plan Reviews Required ▪ Inspections Required
Application Processing	<ul style="list-style-type: none"> ▪ Multiple application submission points and processes ▪ The current electronic plan submittal process for standard residential projects via the County's online portal is a two-step process where Customers first submit an application, then receive a link to upload the plans via email, and only then can submit their plans ▪ Application submission and electronic plan review is currently a 	<ul style="list-style-type: none"> ▪ Transition to an online application intake format to offer a convenient alternative to in-person submissions. ▪ Consolidation of two step application and plan submittal process into 1 step improves efficiency and thus reduces cycle time ▪ Automation of townhouse application submission and electronic plan review improves consistency. 	<p>Streamlining the application intake and plan submittal process will simplify the Customer experience as they will no longer need to submit multiple applications to multiple jurisdictions or departments and thus potentially reduce overall cycle times.</p> <p>Beneficiaries:</p> <ul style="list-style-type: none"> ▪ Architects ▪ Engineers ▪ Residential Building Contractors ▪ Homeowners ▪ Realtors/Brokers 	<p>See Section 3.2</p>

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
	manual process for townhouse projects			
Plan Review	<ul style="list-style-type: none"> ▪ If the Customer must submit plans to NCDOT or Charlotte Water as part of their project, these agencies only accept paper plans and the Customer must go through a separate submittal process with them. ▪ Staff must access multiple, separate systems to support residential processes: POSSE, Bluebeam, and E-Plan. 	<ul style="list-style-type: none"> ▪ ¹Requiring these agencies to use the selected technology solution, or implement a workaround to have their data entered into the system ▪ Consider choosing a technology solution that has a seamless integration between the permitting and plan review solution 	N/A	See Section 3.4
Permit Issuance	N/A	No changes are proposed to the current process in place	N/A	N/A
Inspection & Enforcement	<ul style="list-style-type: none"> ▪ Inconsistent inspection scheduling processes across the City, County, and other agencies. ▪ Customer coordinates with multiple parties to receive inspection results 	<ul style="list-style-type: none"> ▪ Standardized processes for inspection scheduling to ensure consistent expectations and reduced confusion for the Customer. ▪ Single point of review of inspection results for the Customer to eliminate the need for the Customer to navigate multiple 	Streamlining the inspection process will provide the Customer with consistent expectations and one source of truth for inspection scheduling and results. Beneficiaries: <ul style="list-style-type: none"> ▪ Engineers ▪ Residential Building Contractors 	See Section 3.6

¹ **Note:** These issues are due to current technology restrictions and decisions, and should be addressed as part of Program 6.

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
		contacts in order to receive results.	▪ Homeowners	

2.3.3 Service: Support Standard Commercial Project

This section describes the Support Standard Commercial Project services within the Development Services category.

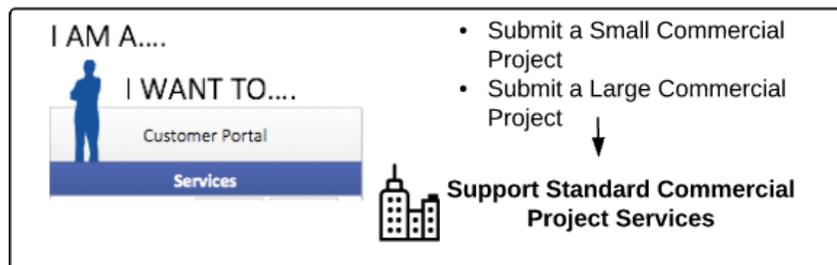
The major components of the Support Standard Commercial Project are outlined below.

Table 20. Support Standard Commercial Project

Future State Service Delivery Model - Services	Supporting Lifecycle Steps			
Category: Development Services				
Service: Support Subdivision Project				
Customer Objective: Apply to Subdivide Land	Application Processing	Plan Review	May Need: Permit Issuance	May Need: Inspection & Enforcement
Service: Support Residential Project				
Customer Objective: Submit Standard Residential Project	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Customer Objective: Submit Townhouse Project	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Customer Objective: Submit Master Plan Project	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Service: Support Standard Commercial Project				
Customer Objective: Submit Small Commercial Project	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Customer Objective: Submit Large Commercial Project	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Service: Support Complex Commercial Project				
Customer Objective: Submit "Mega" Commercial Project (High Rise, Large Schools, Malls, Large Mix Use Project, Airports, Stadiums, Waste Water Treatment Plants, Arenas)	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Customer Objective: Submit "Hybrid/HCDT" Commercial Project (Use 3D computer modeling; example: Hospital)	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement

Future State Description

A “standard” commercial project is defined in this service as a small or large commercial project that is not particularly complex (e.g., no more than 8 hours of plan review time per reviewer). It is not a complex project such as a high-rise or a hospital. Specific eligibility criteria by project type, size, and complexity can be further defined by the City and the County for configuration in the future state solution. This joint City and County service will support all standard commercial project types.



Customer Segments that would consume this service include:

- Engineers
- Contractors
- Owners/Developers
- Small Business Developers

*Customer Segments developed by Customer Service Solutions (CSS)

The Customer will be encouraged to submit their application for the project through a joint City/County online portal. Each application form should be customized according to the project type selected by the Customer. The exact workflow and business processes that will come together to support the service is also dependent on the commercial project type. Example project types can include the following:

- Project type for grading only (e.g., Commercial Grading Permit Application)
- Project type for grading and additional site work like parking lots and underground utilities (e.g., Commercial Site-work Permit Application)
- Project type for a remodel of an existing building (e.g., Commercial Remodel Permit Application)
- Project type for a new commercial building (e.g., Commercial Building Permit Application)

Depending on the project type, the required reviews, submission requirements, etc. should be systematically triggered at the time of application submission. There will be one point of intake for the application, and all reviews (City, County, other agencies) will be tracked and monitored within the same system.

Projects should be tracked at the property level, so if a new or revised project is submitted in the future for a property with an existing or previous project associated with that property, the appropriate review(s) will be generated to ensure nothing is missed.

Application submittal will trigger a few processes. First, a system should perform an automated zoning check (when possible), which verifies that the intended use of the building complies with the zoning ordinances for that property. It should also check for other conditions, such as a historical district or floodplain, which should trigger other requirements for the project that the Customer will need to address either at application submission, or later on in the project lifecycle, according to business rules. If the intended use is not compliant with the conditions attached to the parcel record, then the Customer will be prompted to initiate a zoning request (see [Zoning Services](#) section).

Once the Customer finishes the application process and submits their standard commercial project application through the online portal, the system should route the application for compliance review. A system should determine – upon predefined and configured business rules for that application type – which staff to route the application to for the compliance review. Once the application is approved for completeness, a system should generate the required reviews that must be satisfied in order for the Customer to receive their permit. This list of required reviews can be a checklist that the Customer can follow to know what plans and other supporting documentation he or she must submit. Whether the Customer begins site development first, building development first, or site and building development concurrently, the checklist and requirements will fit their project type.

Once the Customer submits a set of plans or a document type to satisfy a review type on the checklist, a system should route the files to the designated reviewer(s) work queue. Required

reviewers should be configured in a system according to business rules and enforced by system workflow. It is recommended that all participating reviewers be users of one system and all plan review comments and markup occur within one system. A system should automatically route the plans to the assigned reviewers, reducing the need for multiple submissions by the Customer. Further, plan review results are available in one place and plan review status is comprehensive of all plan reviewers involved.

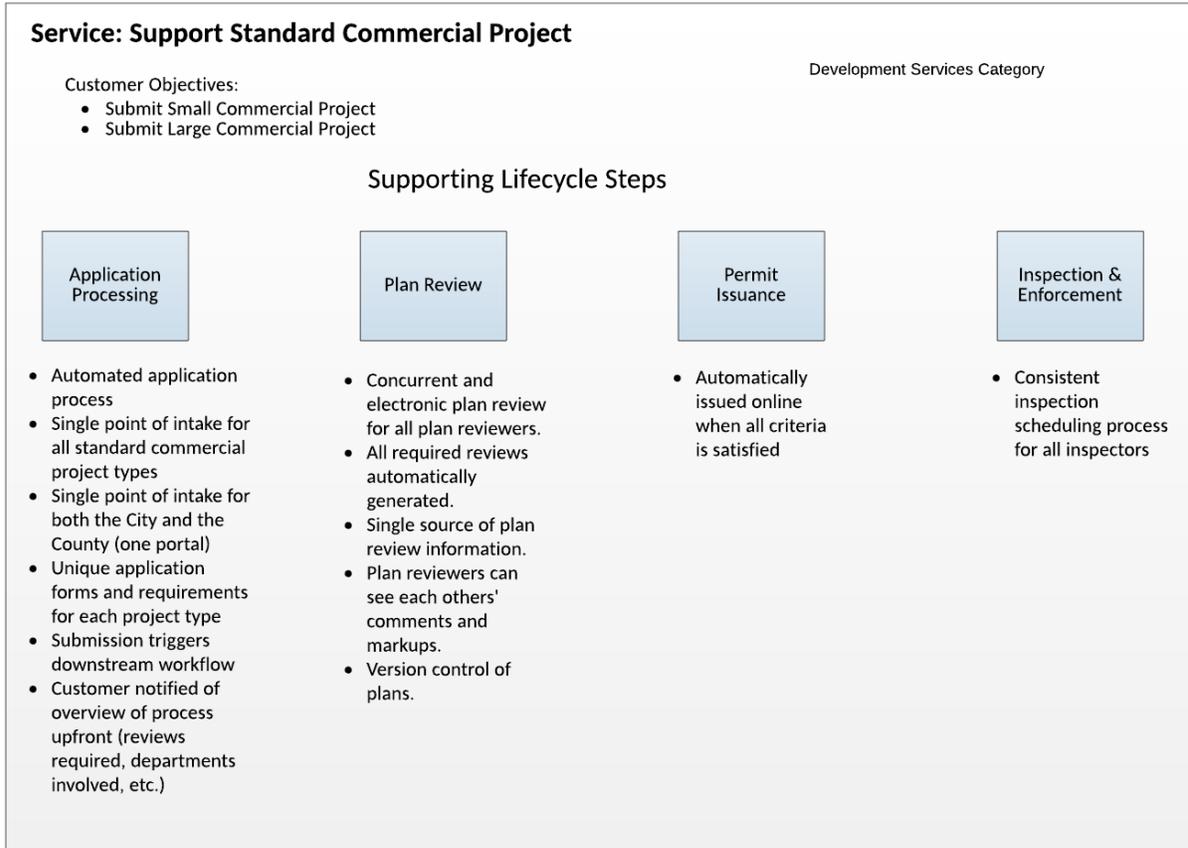
If a reviewing agency is not in the system (for example, the North Carolina Department of Transportation (NCDOT) is expected to continue a manual process) its review should still be tracked in a system and monitored. For eligible customer types and projects, assignment of a Project Advocate would provide a single point of contact to guide customers through the appropriate process and assist in communication with the various City, County, and other agency actors that the Customer must interact with to successfully achieve their objectives. The Project Advocate could be responsible for monitoring the response time of NC DOT and following up with them if they are close to missing their deadline, and also be responsible for logging the results of the NC DOT review in a system.

Once the plan review checklist has been satisfied, the associated permit(s) can be issued systematically. Issuance of the permits triggers required inspections that must be performed and resulted in a system before final clearance documentation (e.g., Certificate of Occupancy) can be issued. When the Customer is ready for an inspection to occur, the Customer will schedule the inspection request through the online portal. Inspections will be assigned, performed, and resulted via the standardized inspection processes outlined in the [Inspection Business Process section](#).

Once all required inspections have been satisfied, the CO and/or other document(s) will be posted to the online portal for the Customer to print, and will be saved to the project's record in a system.

The service and its supporting Lifecycle Steps and business processes are highlighted below:

Figure 31. Support Standard Commercial Project Service - Supporting Lifecycle Steps



An example of a project flowing through the service is illustrated below. Projects differ from each other, and not every alternate path is illustrated in the diagram, but with defined Lifecycle Steps and Business Processes, the track each project will follow is still predictable, and can be measured, managed, and communicated.

Figure 32. Support Standard Commercial Project Service – Potential Supporting Business Processes

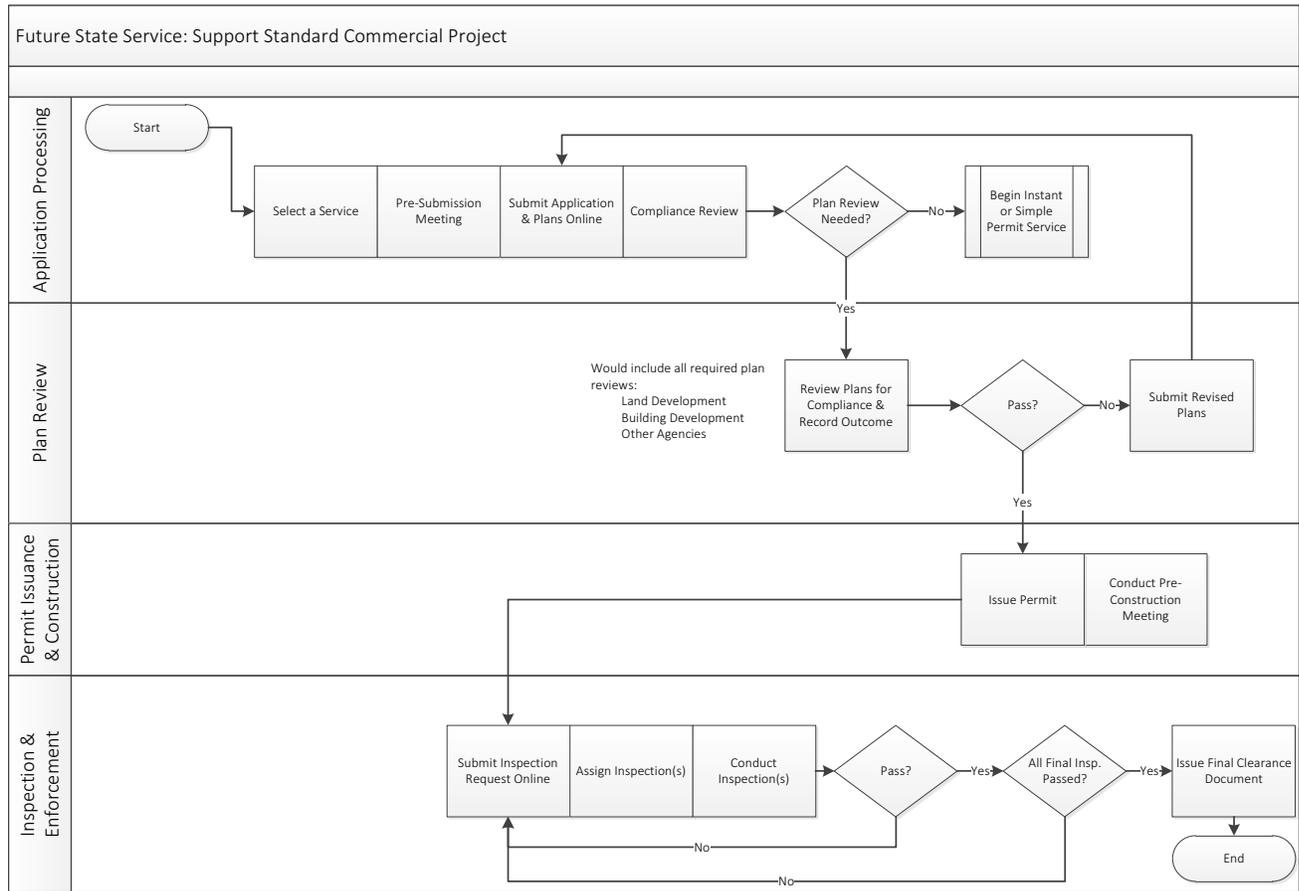


Figure 33. Technology Considerations to Support Standard Commercial Service



Technology Considerations for Program 6: Establish Long-Term Permitting and Plan Review Application Strategy and Implement

- Consolidation of multiple online customer portals into one, single portal for all customers across all organizations.
- Single online payment gateway for all online transactions.
- Configurable solution that supports automated workflow and business rules.
- Track land entitlement conditions at the parcel level, via property record data and/or GIS layers.
- One electronic plan review solution for all plan reviewers that enables concurrent plan review, version control, and provides a single source of truth for plan review information.
- Elimination of paper plan review.

Current State Description

Note: The current state description is based on information provided to Gartner as of June 2015.

The future state Support Standard Commercial Project service consolidates existing City and County current state processes that support small and large commercial projects into one, consistent service. While the City has a standard commercial plan review process (which supports both small and large commercial projects), the County has two processes: a “CTAC” review process for small commercial projects, and the “On Schedule” plan review process for large, standard (not particularly complex) commercial projects.

In the current state, the Customer must submit plans separately to the City and the County, through the Accela Citizen Access portal and the EPM system, respectively. The Customer has the option to submit with the County or the City first, according to their preference. The Customer may also need to submit separately with other agencies (i.e. North Carolina Department of Transportation, Charlotte Water, Town planning departments, etc.) through their own individual submittal and review processes (often paper-based and with varying timeframes), and Customers are responsible for driving and coordinating those processes. The Customer will not receive their building permit from the County until all required reviews are completed. This is enforced through the “hold” process in POSSE.

City Commercial Plan Review Process

To initiate the process, the Customer submits the commercial plans for review through the Accela Citizen Access online portal. The City checks the zoning conditions for the site (e.g., ensures no rezoning is needed), and additional City staff also performs a commercial land development plan review to ensure compliance with City ordinances. The City’s goal is to complete the review within 15 business days. The City also offers an expedited review option (5 business day review) for eligible plan review types and projects whose scope allow for an expedited review.

County Commercial Plan Review Processes

The future state Support a Standard Commercial Project service consolidates two of the County’s existing commercial plan review processes: the CTAC commercial project plan review, and the On Schedule commercial plan review.

- *CTAC Plan Review Process* - Eligible, small commercial projects are channeled through the County’s Commercial Technical Assistance Center (CTAC). Eligibility is determined manually by CTAC according to project’s type, size and complexity. Reviews are generally completed by CTAC within 5-7 business days.
 - ❑ The Customer interacts with the CTAC online portal, the POSSE Contractor Dashboard, for application submission and printing their final approved permit(s) and plans. Application submittal is a two step process: First, the Customer submits an application via the County’s Contractor Online Portal, which links back to the County’s POSSE system; then the POSSE system emails the Contractor with a submittal number and a link to upload the plans.
 - ❑ County staff uses the POSSE system to manage the application and plan review process, and also uses the Bluebeam plan review markup tool to redline the plans, uploading the final marked up version into POSSE. (Note: They are working in two systems).
 - ❑ CTAC also offers a “Walk-Thru” process for eligible project types and project teams with a superior plan review track record, which is an in-person, same day review,

rather than the 5-7 day review period discussed above. Available appointments are given according to 'first come, first served' for that day.

- *On-Schedule Plan Review Process* - Projects that are too large or too complex for CTAC review are channeled through the County's On Schedule Plan Review program. Eligibility for the On Schedule process typically is defined as requiring no more than eight hours of plan review time for each trade.
 - ❑ For the On Schedule process, the Customer primarily interacts with the County's Electronic Plans Management (EPM) System (www.meckpermit.com) to submit the application and manage their project going forward, such as viewing plan review comments and printing permit(s). EPM interfaces with the County's permitting system, POSSE.
 - ❑ The On Schedule process supports an appointment-based plan review process. The submitted application is routed to County Plans Examiners who manually estimate the length of plan review time needed. Based on the estimation, a review date and required fee is posted on the customer's dashboard in the EPM system. The Customer then confirms or rejects the date within 48 hours of scheduling. The Customer must upload plans for review and complete other activities according to the agreed upon dates, and the County Plans Examiners review the plans on the scheduled plan review date.
 - If the Customer misses the deadline for uploading their plans, they owe a fee and need to reschedule their new On Schedule review date, which may be delayed due to limited available appointments.
- The County uses multiple, integrated systems to support the On Schedule process:
 - ❑ POSSE is the County's system of record, used to manage all permitting, inspection, and enforcement activities. POSSE contains all holds information, plan review status, and inspections. There are a number of dashboards that have been implemented to facilitate Customer and external agency views of POSSE project information.
 - ❑ EPM supports the electronic plan review process, including assigning the project to a Project Coordinator who assigns plans reviewers, generates Outlook calendar appointments, and supports plans markup using the Bluebeam Revu tool. EPM integrates with POSSE (receives project number from POSSE, EPM can trigger holds in POSSE, but hold release is done in POSSE).
- The County also offers an On Schedule Express Plan Review option, which includes both a complete project plan review option and also a partial project plan review option. The goal is to reduce the plan review process from weeks to a single review session, and in most cases permits can be issued within two business days.

Table 21. Gap Analysis Between Current State and Future State Standard Commercial Project Service Delivery

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
Overall Standard Commercial Project Services	<ul style="list-style-type: none"> ▪ Multiple processes are in place to support various commercial project types, which can be confusing to Customers. ▪ Customers must research where to submit their projects, and figure out who to contact if they have questions. ▪ The large number of people involved (City, County, Towns, NCDOT, Charlotte Water, City Fire, County Fire) can be overwhelming to Customers, and frustrating to coordinate with all parties separately. ▪ There is not one consolidated view of a given project. The status of the project and its tasks are distributed across multiple, disparate organizations. ▪ A single “government” coordinator does not monitor a given project due to the disparate process and multiple intake points. The customer must 	<ul style="list-style-type: none"> ▪ Consolidate and standardize multiple processes to support commercial projects into one process that supports multiple standard commercial project types 	<p>Customers will no longer need to navigate multiple processes or have to research where/who to submit to.</p> <ul style="list-style-type: none"> ▪ Engineers ▪ Contractors ▪ Owners/ Developers ▪ Small Business Developers 	<ul style="list-style-type: none"> ▪ Consolidate existing multiple online portals into one comprehensive portal for all residential projects. ▪ Setup commercial plan review in system: <ul style="list-style-type: none"> ▪ Application Form ▪ Routing Rules ▪ Plan Reviews Required ▪ Inspections Required

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
	<p>coordinate with multiple actors and/or check multiple websites to determine the status of their project, resolve issues, etc.</p>			
Application Processing	<ul style="list-style-type: none"> ▪ Multiple application submission points and processes ▪ The current electronic plan submittal process for the City and the County greatly differ from each other (first in first out vs. appointment based model). ▪ Application submission is currently a manual process for some external reviewing agencies (e.g., NCDOT) 	<ul style="list-style-type: none"> ▪ Transition to a single point of submission to minimize confusion and reduce the burden on Customers to submit to different portals for different projects, and maintain multiple accounts. 	<p>Streamlining the application intake and plan submittal process will simplify the Customer experience as they will no longer need to submit multiple applications to multiple jurisdictions or departments and thus potentially reduce overall cycle times.</p> <ul style="list-style-type: none"> ▪ Engineers ▪ Contractors ▪ Owners/ Developers ▪ Small Business Developers 	See Section 3.2.
Plan Review	<ul style="list-style-type: none"> ▪ If the Customer must submit plans to NCDOT or Charlotte Water as part of their project, these agencies only accept paper plans and the Customer must go through a separate submittal process with them. 	<ul style="list-style-type: none"> ▪ ¹Requiring these agencies to use the selected technology solution, or implement a workaround to have their data entered into the system ▪ Consider choosing a technology solution that has a seamless 	<p>This streamlines the application and plan submittal process for the Customer.</p> <ul style="list-style-type: none"> ▪ Engineers ▪ Contractors ▪ Owners/ Developers ▪ Small Business Developers 	See Section 3.4.

¹ **Note:** These issues are due to current technology restrictions and decisions, and should be addressed as part of Program 6.

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
	<ul style="list-style-type: none"> ▪ Customer must submit to two different online portals for both the City and the County. ▪ Customer must estimate when his or her plans will be ready for County review (On-Schedule process). 	integration between the permitting and plan review solution		
Permit Issuance	N/A	No changes are proposed to the current process in place	N/A	N/A
Inspection & Enforcement	<ul style="list-style-type: none"> ▪ Inconsistent inspection scheduling processes across the City, County, and other agencies. ▪ Customer coordinates with multiple parties to receive inspection results 	<ul style="list-style-type: none"> ▪ Consistent processes for inspection scheduling reduces confusion for the Customer. ▪ Single point of review of inspection results for Customer eliminating the need for the Customer to navigate multiple contacts to receive results. 	Streamlining the inspection process will provide the Customer with consistent expectations and one source of truth for inspection scheduling and results. <ul style="list-style-type: none"> ▪ Engineers ▪ Contractors ▪ Owners/ Developers ▪ Small Business Developers 	See Section 3.6.

2.3.4 Service: Support Complex Commercial Project

This section describes the Support Complex Commercial Project Service within the Development Services category, which supports Customers that want to:

- Submit an application for a Commercial Mega-Project type, which includes a commercial project type such as a high rise, large school, mall, large mixed use project, stadium, waste water treatment plant, arenas, etc. that require more touchpoints than a standard commercial project.
- Submit an application for a Hybrid Commercial Development Team (HCDDT) Project type for very complex commercial projects, such as a hospital, which use 3D modelling tools and require a more collaborative approach to plan review and inspections than a standard commercial project.

Table 22. Support Complex Commercial Project

Future State Service Delivery Model - Services	Supporting Lifecycle Steps			
Category: Development Services				
Service: Support Subdivision Project				
Customer Objective: Apply to Subdivide Land	Application Processing	Plan Review	<i>May Need:</i> Permit Issuance	<i>May Need:</i> Inspection & Enforcement
Service: Support Residential Project				
Customer Objective: Submit Standard Residential Project	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Customer Objective: Submit Townhouse Project	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Customer Objective: Submit Master Plan Project	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Service: Support Standard Commercial Project				
Customer Objective: Submit Small Commercial Project	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Customer Objective: Submit Large Commercial Project	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Service: Support Complex Commercial Project				
Customer Objective: Submit "Mega" Commercial Project (High Rise, Large Schools, Malls, Large Mix Use Project, Airports, Stadiums, Waste Water Treatment Plants, Arenas)	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement
Customer Objective: Submit "Hybrid/HCDDT" Commercial Project (Use 3D computer modeling; example: Hospital)	Application Processing	Plan Review	Permit Issuance	Inspection & Enforcement

Future State Description

The Customer will be encouraged to submit their application for the project through a joint City/County online portal. Each application form should be customized according to the project type selected by the Customer. The exact workflow and business processes that will come together is also dependent on the commercial project type. There will be customized application forms for the different types, such as the following:

- "Mega" Commercial Project Types (i.e. high-rise application, mall application, etc.)
- "HCDDT" Commercial Project type (e.g., hospital application)

Depending on the project type, the required reviews, submission requirements, etc. will be triggered at the time of application submission. There will be one point of intake for the

application, and all reviews (City, County, other agencies) will be tracked and monitored within the same system. Note: The technology solution determined in Program 6 will need to evaluate whether it can support the intake of 3D modelling plans, or if Dropbox will need to continue to be used to intake these large files for HCDT projects.

Application submittal will trigger a few processes. First, a system should perform an automated zoning check (where possible), which verifies that the intended use of the building complies with the zoning ordinances for that property. It should also check for other conditions, such as a historical district or floodplain, which will trigger other requirements for the project that the Customer will need to address either at application submission, or later on in the project lifecycle, according to business rules. If the intended use is not compliant with the conditions attached to the parcel record, then the Customer will be prompted to initiate a zoning request (see [Zoning Services](#) section).

Once the Customer finishes the application process and submits their complex commercial project application through the online portal, a system should route the application for compliance review. A system should determine – upon predefined and configured business rules for that application type – which staff to route the application to for the compliance review. Once the application is approved for completeness, a system should generate the required reviews that must be satisfied in order for the Customer to receive their permit. This list of required reviews will be a checklist that the Customer can follow to know what plans and other supporting documentation he or she must submit. Whether the Customer begins site development first, building development first, or site and building development concurrently, the checklist and requirements will be generated for that project type.

For these complex commercial projects, there will be more reviews generated than in a standard commercial review. Prior to the first plan submission, a pre-submission meeting shall be performed for phased construction to determine the required phases and their associated design/drawings submittal requirements, and handling of code concerns for the actual review/permitting and the development of a Project Permit Master Plan.

Following the initial submission, these projects will require multiple in-person or virtual meetings between the design team and the County's plan reviewers. Typically, there should be an entry meeting prior to each submittal, and an exit meeting at the conclusion of the review cycle, as well as any additional meetings required by the design team or the County review team. These meetings will be scheduled through the online portal and meeting minutes should be taken and uploaded as part of the project record.

HCDT projects will have a slightly different plan review and inspection assignment configuration than Mega Projects. The County offers a 'Hybrid' Model for these very complex projects, such as a hospital, who use 3-D computer modeling instead of two-dimensional plans and drawings. The goal for the Hybrid model is to be a collaborative effort, where plan reviews and permits are issued iteratively, and the same County staff performs plan review and performs the inspections.

Once the Customer submits a set of plans or a document type to satisfy a review type on the checklist, a system should route the files to the designated reviewer(s)' work queue. Required reviewers should be configured in a system according to business rules for that project type, and enforced by workflow in a system. It is recommended that all participating reviewers be users of one system and all plan review comments and markup occur within one system. The system automatically routes the plans to the assigned reviewers, reducing the need for multiple submissions by the Customer. Further, plan review results are also available in one place and plan review status is comprehensive of all plan reviewers involved.

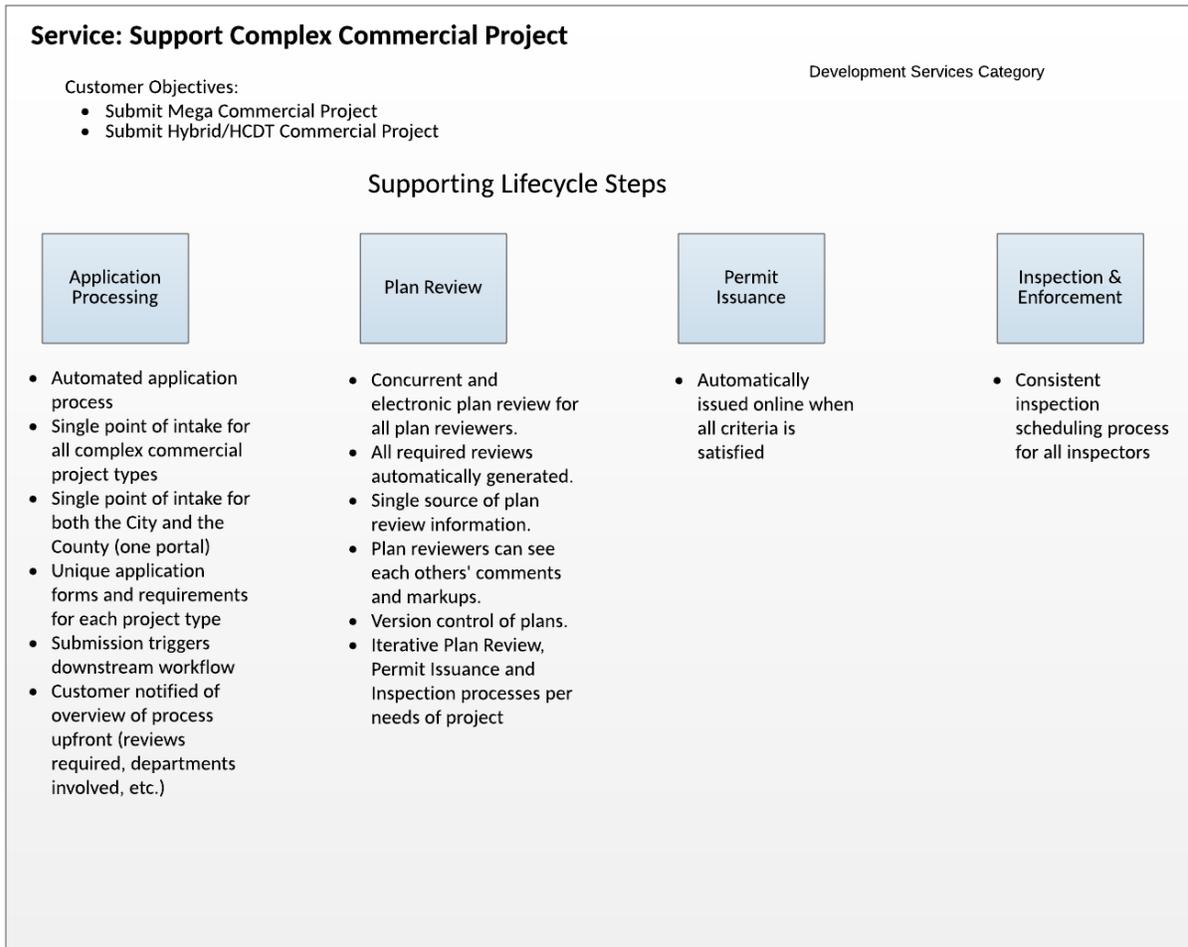
If a reviewing agency is not in the system (for example, the North Carolina Department of Transportation (NCDOT) is expected to continue a manual process) its review should still be tracked in a system and monitored. For eligible customer types and projects, assignment of a Project Advocate would provide a single point of contact to guide customers through the appropriate process and assist in communication with the various City, County, and other agency actors that the Customer must interact with to successfully achieve their objectives. The Project Advocate could be responsible for monitoring the response time of NC DOT and follow up with them if they are close to missing their deadline, and also be responsible for logging the results of the DOT review in the system.

Once the checklist has been satisfied, the associated permit(s) can be issued systematically. Issuance of the permits triggers required inspections that must be performed and resulted in a system before final clearance documentation (e.g., Certificate of Occupancy) can be issued. When the Customer is ready for an inspection to occur, the Customer will schedule the inspection request through the online portal. Inspections will be assigned, performed, and resulted via the standardized inspection processes outlined in the [Inspection Business Process section](#).

Once all required inspections have been satisfied, the CO and/or other document(s) will be posted to the online portal for the Customer to print, and will be saved to the project's record in a system.

The service and its supporting Lifecycle Steps and business processes are highlighted below:

Figure 34. Support Complex Commercial Project Service - Supporting Lifecycle Steps



An example of a project flowing through the service is illustrated below. Projects differ from each other, and not every alternate path is illustrated in the diagram, but with defined Lifecycle Steps and Business Processes, the track each project will follow is still predictable, and can be measured, managed, and communicated.

Figure 35. Support Complex Commercial Project Service – Potential Supporting Business Processes

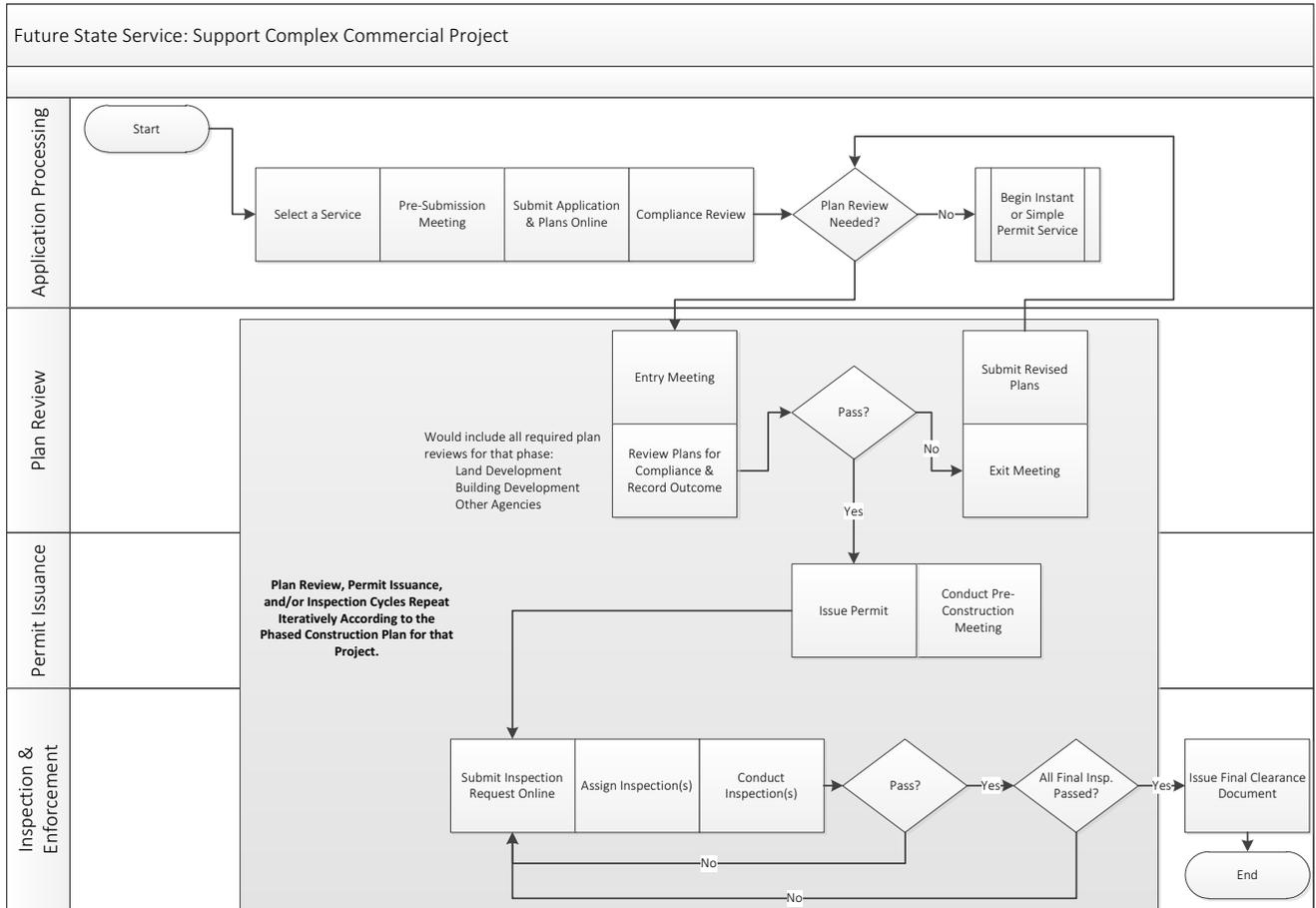


Figure 36. Technology Considerations to Support Complex Commercial Project Service



Technology Considerations for Program 6: Establish Long-Term Permitting and Plan Review Application Strategy and Implement

- Consolidation of multiple online customer portals into one, single portal for all customers across all organizations.
- Single online payment gateway for all online transactions.
- Configurable solution that supports automated workflow and business rules.
- Track land entitlement conditions at the parcel level, via property record data and/or GIS layers.
- One electronic plan review solution for all plan reviewers that enables concurrent plan review, version control, and provides a single source of truth for plan review information.
- Elimination of paper plan review.
- Ability to support intake of 3D modeling plans that are of a very large file size for HCDDT project types

Current State Description

Note: The current state description is based on information provided to Gartner as of June 2015.

The “Commercial Mega-Project” building plan review process was a concept developed by the County to move large, complicated projects through the building plan review process efficiently. The County defines Mega Projects as:

- Any high rise project (building with height at or above 75 feet above Fire Department access, as defined by the Building Code);
- Any assembly project w/ a gross square foot area of 100,000sf or larger;
- Any mixed use project with a gross square foot area of 200,000sf or larger;
- Any commercial or industrial projects with a gross square foot area of 300,000sf or larger;
- Any institutional project with two smoke compartments or a gross sq. ft. area of 50,000sf or larger;
- Other projects of similar size or complexity, requiring staff resources comparable to the above, as determined by the Director or his designee.

The Customer has the option to submit with the County or the City first, or concurrently, according to their preference. The Customer must submit plans separately to the City and the County, through the Accela Citizen Access portal and the EPM system, respectively. The Customer may also need to submit separately with other agencies (i.e. North Carolina Department of Transportation, Charlotte Water, Town planning departments, etc.) through their own individual submittal and review processes, and Customers are responsible for identifying and coordinating those reviews. The County applies various holds to the commercial project in their POSSE system, which helps ensure a building permit is not issued unless all required reviewing agencies have reviewed and approved the project. The hold process is imperfect and can create issues for reviewing agencies and the Customer, as described in other sections.

When submitting with the County, the project follows the “Mega-Project plan review process.” This process is similar to that of the On Schedule process, except that there are more touch points and there are differences in the way meetings are scheduled and fees are paid.

1. Similarly, to the On Schedule process, the Customer submits an On Schedule application through the County’s EPM system, plan review dates are formally scheduled with corresponding due dates for plan upload by the Customer, and the Customer is able to manage their project online. Depending on the size of the project, the County may be able to complete a plan review cycle within 1 - 2 weeks. Mega-Projects have on average 2-3 review cycles.
2. Unlike the On Schedule process, a number of additional meetings are conducted, including the following:
 - a. A Preliminary Meeting with the County is held where the project’s scope is discussed and meeting minutes are taken. An initial Plan Review date is scheduled.
 - b. A gate meeting is scheduled and held prior to the initial plan submittal date, where an initial version of the plans is reviewed and other gatekeeping activities occur.
 - c. If a project fails a trade review, an Exit Meeting is held with those trade(s) and the designer. The purpose of the meeting is to assist the designer in understanding the issues and corrections required for resubmittal.

- d. A Re-Entry/Gate Meeting is required prior to resubmittal, where a narrative response letter is provided by the Customer that addresses all revisions to the project, which is reviewed and discussed with the County. Upon completion of the Re-Entry/Gate Meeting, the Customer can upload the new plans, which triggers a new review cycle.
3. Financial activities are also handled differently for a Mega-Project than an On Schedule process. The County requires the owner, lead designer, or lead design firm to establish a Land Use bond account with the LUESA Revenue Collection Department with a minimum bond amount of \$50,000 following the initial project scoping meeting. Customers are invoiced monthly for Mega Project fees, which can include hourly charges for County staff time as well as phased construction fees, if applicable.

The City does not have a corresponding “Mega-Project” plan review process. Instead, the project follows the City’s standard commercial plan review process. The Customer submits the commercial plans for review through the Accela Citizen Access online portal. The City completes their land development plan review, which ensures the project is eligible for the location (e.g., manual zoning check) and that the project and plans are compliant with City ordinances and standards for public street infrastructure. The City’s goal is to complete the review within 15 business days. The City does not offer an expedited review option (5 business day review) for particularly large or complex projects.

The County offers a ‘Hybrid’ Model for very complex commercial projects, such as a hospital, that use 3-D computer modeling instead of two-dimensional plans and drawings. Additionally, the Hybrid model allows for plan reviews and permits to be issued iteratively, and the same County staff performs the plan review and subsequent inspections. The County’s ‘Hybrid’ Plan Review process is described below:

- The Customer contacts the HCDT Team to determine eligibility for the program (phone call, meeting). Upon approval, Customer submits an application through EPM for a Preliminary Meeting. The Preliminary Meeting is conducted and agreements are captured via meeting minutes, which are uploaded by the Customer into EPM.
- Customer submits an ‘umbrella permit application’ via EPM as well as an On Schedule Application, and completes other various requirements for submission. Then, an iterative plan submission and plan review process begins.
- Plan review times are estimated and scheduled in EPM. Plan review comments are captured in EPM while revised and redlined plans are all exchanged via Dropbox. Once items are approved, construction begins on those pieces. The plan review process continues for remaining parts of the project.
- When the project is ready for final inspection, the typical process for obtaining a CO illustrated in the previous section is executed. Additionally, a final validation review is conducted to ensure the final drawings match the building, prior to issuance.

The Customer also must submit separately with other agencies (i.e. North Carolina Department of Transportation, Charlotte Water, City or Town zoning, etc.) through their own individual submittal and review processes, and Customers are responsible for identifying and coordinating those reviews. The County applies various holds to the commercial project in their POSSE system, which helps ensure a building permit is not issued unless all required reviewing agencies have reviewed and approved the project. The hold process is imperfect and can create issues for reviewing agencies and the Customer, as described in other sections. The Customer has the option to submit with the County or the City (or Town) first, or concurrently, according to their preference.

Similar to the Mega-Project process, the City does not have a corresponding “HCDT” plan review process and performs their standard commercial review process, which is supported by the Accela system. The City does not offer an expedited review option (5 business day review) for particularly large or complex projects.

Table 23. Gap Analysis Between Current State and Future State Complex Commercial Project Service Delivery

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
Overall Complex Commercial Project Services	<ul style="list-style-type: none"> ▪ Multiple processes are in place to support various commercial project types, which can be confusing to Customers. ▪ Customers must research where to submit their projects, and figure out who to contact if they have questions. ▪ The large number of people involved (City, County, Towns, NCDOT, Charlotte Water, City Fire, County Fire) can be overwhelming to Customers, and frustrating to coordinate with all parties separately. ▪ There is not one consolidated view of a given project. The status of the project and its tasks are distributed across multiple, disparate organizations. ▪ A single “government” coordinator does not monitor a given project due to the disparate process and multiple intake points. The customer must 	<ul style="list-style-type: none"> ▪ Consolidate and standardize multiple processes to support commercial projects into one process that supports multiple standard commercial project types 	<p>Customers will no longer need to navigate multiple processes or have to research where/who to submit to.</p> <ul style="list-style-type: none"> ▪ Engineers ▪ Contractors ▪ Owners/ Developers ▪ Small Business Developers 	<ul style="list-style-type: none"> ▪ Consolidate existing multiple online portals into one comprehensive portal for all residential projects. ▪ Setup commercial plan review in system: <ul style="list-style-type: none"> ▪ Application Form ▪ Routing Rules ▪ Plan Reviews Required ▪ Inspections Required

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
	<p>coordinate with multiple actors and/or check multiple websites to determine the status of their project, resolve issues, etc.</p>			
Application Processing	<ul style="list-style-type: none"> ▪ Multiple application submission points and processes ▪ The current electronic plan submittal process for the City and the County greatly differ from each other (first in first out vs. appointment based model). ▪ Application submission is currently a manual process for some external reviewing agencies (e.g., NCDOT) 	<ul style="list-style-type: none"> ▪ Transition to a single point of submission to minimize confusion and reduce the burden on Customers to submit to different portals for different projects, and maintain multiple accounts. 	<p>Streamlining the application intake and plan submittal process will simplify the Customer experience as they will no longer need to submit multiple applications to multiple jurisdictions or departments and thus potentially reduce overall cycle times.</p> <ul style="list-style-type: none"> ▪ Engineers ▪ Contractors ▪ Owners/ Developers ▪ Small Business Developers 	<p>See Section 3.2.</p>
Plan Review	<ul style="list-style-type: none"> ▪ If the Customer must submit plans to NCDOT or Charlotte Water as part of their project, these agencies only accept paper plans and the Customer must go through a separate submittal process with them. 	<ul style="list-style-type: none"> ▪ ¹Requiring these agencies to use the selected technology solution, or implement a workaround to have their data entered into the system ▪ Consider choosing a technology solution that has a seamless 	<p>This streamlines the application and plan submittal process for the Customer.</p> <ul style="list-style-type: none"> ▪ Engineers ▪ Contractors ▪ Owners/ Developers ▪ Small Business Developers 	<p>See Section 3.4.</p>

¹ **Note:** These issues are due to current technology restrictions and decisions, and should be addressed as part of Program 6.

Area of Focus	Current State Pain Points	Future State Improvements	Customer Benefits & Beneficiaries	Next Steps to Achieve Future State
	<ul style="list-style-type: none"> ▪ Customer must submit to two different online portals for both the City and the County. ▪ Customer must estimate when his or her plans will be ready for County review (On Schedule process). 	integration between the permitting and plan review solution		
Permit Issuance	N/A	No changes are proposed to the current process in place	N/A	N/A
Inspection & Enforcement	<ul style="list-style-type: none"> ▪ Inconsistent inspection scheduling processes across the City, County, and other agencies. ▪ Customer coordinates with multiple parties to receive inspection results 	<ul style="list-style-type: none"> ▪ Consistent processes for inspection scheduling reduces confusion for the Customer. ▪ Single point of review of inspection results for Customer eliminating the need for the Customer to navigate multiple contacts to receive results. 	Streamlining the inspection process will provide the Customer with consistent expectations and one source of truth for inspection scheduling and results. <ul style="list-style-type: none"> ▪ Engineers ▪ Contractors ▪ Owners/ Developers ▪ Small Business Developers 	See Section 3.6

3.0 Business Process Description Section

In the previous section Gartner identified the joint City/County Future State Service Delivery Model, including the services the City and County’s Customers will be able to consume. Next, we elaborate on the process steps required to deliver that service.

Critical to the Future State Service Delivery Model is an understanding of the core concepts that underpin it. Gartner created logical groupings to help categorize common activities and processes. The table below describes the four core concepts that comprise the Future State Service Delivery Model.

Table 24. Future State Service Delivery Model Concepts

Concept	Description	Examples
Service Categories	...consist of several services that are logically grouped together given they yield similar, or related, desired Customer outcomes.	<ul style="list-style-type: none"> ▪ Simple Permitting Services ▪ Zoning Services ▪ Development Services
Services	...finite list of development services offerings delivered by government (City, County and/or Towns) in easy-to-understand terminology, that is comprised of multiple Lifecycle Steps properly sequenced to achieve the Customers’ desired outcome.	<ul style="list-style-type: none"> ▪ Apply for Simple Residential Permit ▪ Apply for Conditional Rezoning ▪ Submit Townhouse Project
Lifecycle Steps	...consist of several business processes that are logically grouped to provide easy-to-reference catalogs of several properly sequenced processes required to deliver the service.	<ul style="list-style-type: none"> ▪ Application Submission & Processing ▪ Plan Review ▪ Inspection and Enforcement
Business Processes	...define the major procedural steps performed by Customers and/or Staff to satisfy requirements for a specific function.	<ul style="list-style-type: none"> ▪ Compliance review ▪ Prepare for Hearing ▪ Pay Fee

The first two components, the Service Categories and Services, were addressed in [Section 2](#). The following sections explain the Lifecycle Steps and Business Processes that provide the foundation for the services identified in the previous section.

3.1 Overview

3.1.1 Lifecycle Steps

Services are supported by organized sets of business processes, or Lifecycle Steps. These Lifecycle Steps, which are based on best practices Gartner has observed in other jurisdictions,

have been tailored to the specific characteristics of the City and the County. The grouping conventions are intended to provide an easy to reference catalog of business process groups that also “speak the language” of the customer and provide measurable progress points that can be communicated to alert customers and City and County staff alike.

Figure 37. Future State Lifecycle Steps

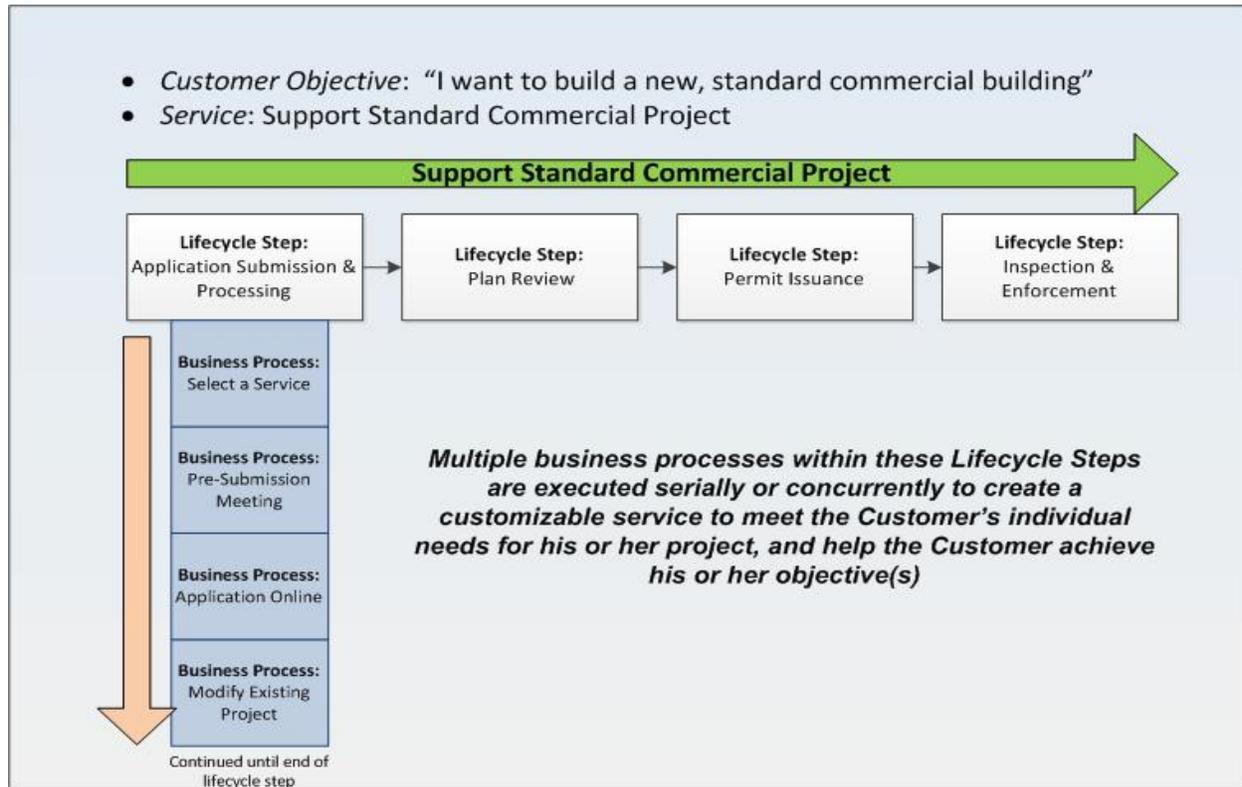


Every project is different. While two customers may each submit commercial development applications, the projects may take very different paths, which affects the business processes that may be executed to deliver that service. For example, Person A may take advantage of expedited plan review and inspection processes, while Person B may never choose to utilize those processes. As such, the Future State Service Delivery Model is customizable to each Customer’s needs, providing a standard set of business processes to choose from.

This flexibility and Customer-centric focus is a key benefit of the Future State Service Delivery Model. While the services provided and supporting business processes are predictable and well-defined, the options available to the Customer are tailored to his or her needs and project type. There will always be exceptions to manage, but employing an approach that can optimize the majority of Customer interactions will achieve a number of benefits sought by the City and County.

For example, if a Customer’s objective is to initiate and complete a new commercial development project, the City and the County offers the “Support Standard Commercial Project Service” to support the project through a series of Lifecycle Steps that, in turn, are comprised of a number of business processes. Some of the Lifecycle Steps and Business Processes are standard, others are a result of the specific nature of the commercial project and of the specific customer. However, defining the component pieces required to deliver the service, with built-in flexibility to account for the specific characteristics and objectives of the customer, creates a Future State Service Delivery Model that is more predictable, efficient and transparent.

Figure 38. Example Service – Support Standard Commercial Project



The “Support Standard Commercial Project Service” streamlines the Customer’s experience by tying together the business processes currently required by the County and the City today to support commercial development projects. The City and County processes are integrated, rather than disparate, and redundant activities for the Customer are eliminated. Finally, there are defined milestones within each service that can communicate progress to the customer, as well as to the City and County.

3.1.2 Business Processes

Within the Lifecycle Steps identified above, multiple business processes link together to aid in delivering a service. The figure below identifies all future state business processes by Lifecycle Step. These business processes are outlined in further detail in the following sections.

In the figure below Lifecycle Steps are listed vertically and their associated Business Processes are shown horizontally. The boxes in the figure are not intended to display a workflow, or order of steps. The diagram is for illustration of the categorizations only. Business processes across projects will vary according to the project type, its complexity, and preferences of the Customer.

Figure 39. Future State Business Processes by Lifecycle Step

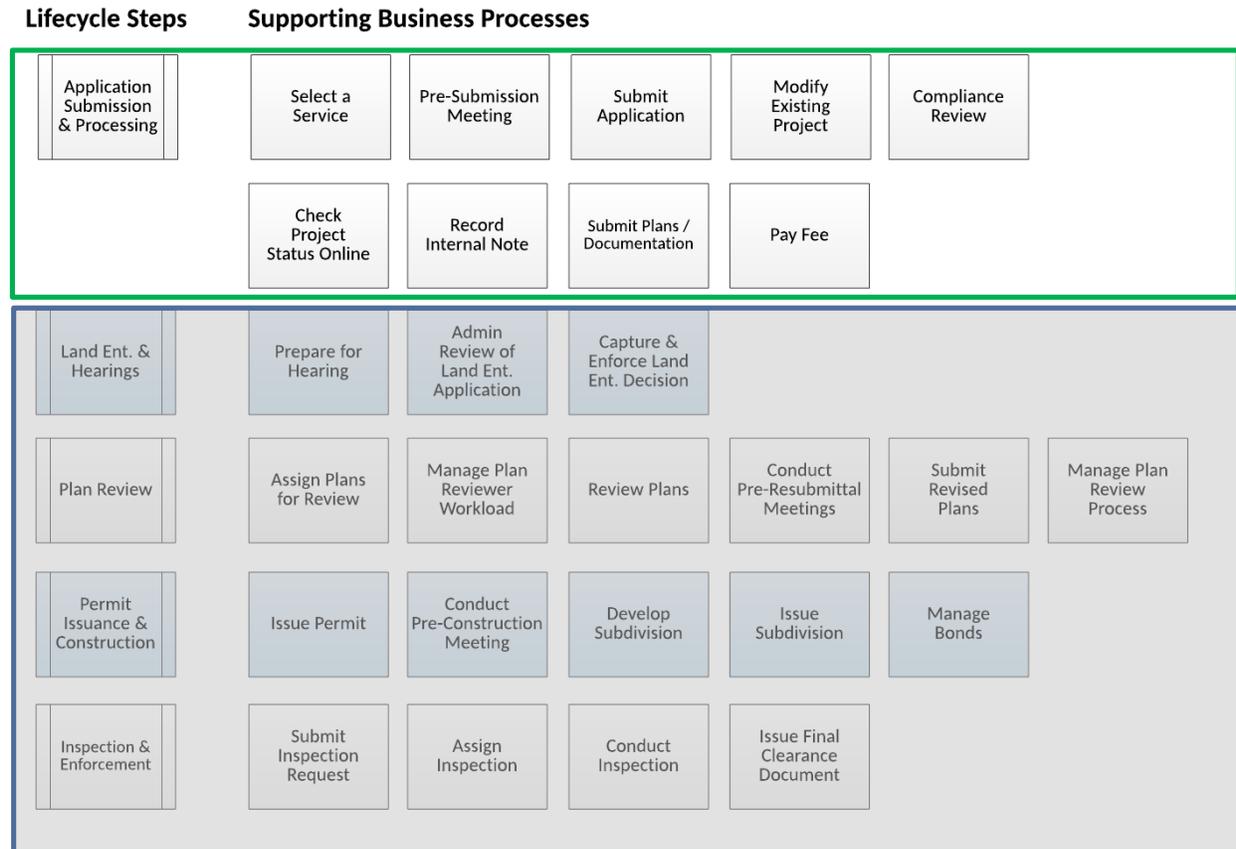


The following sections address the supporting business processes in the Future State Service Model’s Lifecycle Steps:

- Application Submission & Processing
- Land Entitlement & Hearings
- Plan Review
- Permit Issuance & Construction
- Inspections & Enforcement
- Administration

3.2 Application Submission & Processing Life Cycle & Supporting Business Processes

The Application Submission & Processing Lifecycle contains 9 business processes that support application intake and processing across all services (Simple Permitting, Zoning, and Development Services), illustrated in the figure below.



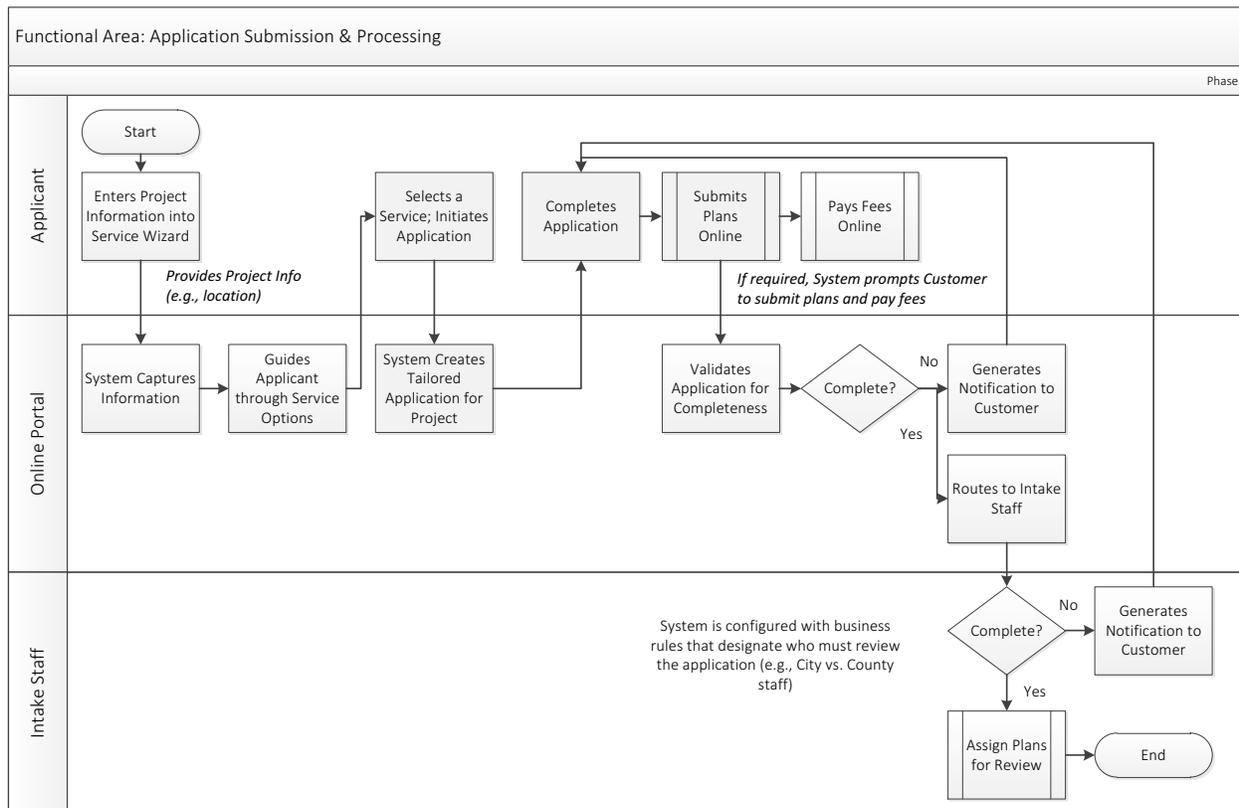
Application Submission & Processing Lifecycle – Supporting Business Processes

- Select a Service:** To initiate the application process, the Customer can use the optional “Select a Service” wizard that guides the Customer to the appropriate service, or “door”, to enter. An experienced Customer can bypass this tool if they know the application type they want to submit.
- Pre-Submission Meeting:** To help ensure a smoother submission process, the Customer can optionally schedule and participate in a pre-submission meeting with the appropriate personnel that will be supporting their project.
- Submit Application:** Based on the service type and information provided by the Customer about their project, a customized application is generated to collect all relevant information for complete processing.
- Submit Plans / Documentation:** The Customer may be required to submit plans and/or other supporting documentation as part of their application. This will be part of the application process.

- **Pay Fee:** If the Customer owes fees at the time of application submission, or at another point in the project, payment will be taken via the online portal.
- **Modify Existing Project:** Alternatively, if a Customer already has a project in the System, he or she can log into the online portal to view its status and make any changes (e.g., add permits) to the project.
- **Compliance Review:** The submitted application will be routed to the appropriate intake staff to complete a cursory review to ensure all required information is completed prior to more technical review.
- **Check Project Status Online:** The Customer will be able to view their project's status online.
- **Record Internal Note:** This is an internal communication tool to improve interaction and exchange of information between the City and County personnel jointly working on a project.

The business process steps described will support a more streamlined approach for Customers to submit an application to the City and County to achieve his/her desired outcome. While a technology solution is not necessary, one would likely make the processes more efficient and improve the City and County's ability to deliver service to Customers. The figure below demonstrates how the use of a single online portal can be used to complete the Application Submission process.

Figure 40. Sample Project Flow through the Application Submission & Process Life Cycle



3.2.1 Process: Select a Service

For Customers that require assistance in determining the service he or she needs to initiate with the City/County, the online portal should offer a “Select a Service” wizard tool. This online tool should mimic the questions that a Customer Service representative would ask a Customer in person, to assist them in applying for a service.

Table 25. Select a Service Overview

Process: Select a Service	
<p>The initial step of Customers interacting with the City and the County is to utilize the online portal’s select a service wizard to select the appropriate service that meets their needs. For simple processes, this may be as simple as selecting “I want to…” from a list of predefined customer-centric service definitions. In more complicated cases, the online portal would assist the user through a structured process (e.g., “wizard style”) to propose the applicable service for the building project.</p> <p>The wizard presents a structured and guided series of questions that reflect a predetermined dynamic decision tree to assist the user with the selection process. Examples of questions the wizard could ask are below:</p> <ul style="list-style-type: none"> ■ “Are you planning a construction project?” ■ “Is your project of residential or commercial nature?” ■ “Are you planning on installing or modifying signage?” <p>The Customer answers the questions and based on those responses, the wizard presents one or multiple recommended services. The Customer can then select to submit an application for the service(s).</p> <p>Additionally, an overview of the steps involved in processing the request for service is presented to the Customer. This overview will include a list of specific types of review and clearances, departments involved, estimated duration of the process and expected fees that the Customer should be aware of before initiating an application.</p> <p>If the Customer is familiar with the services (e.g., is an “Advanced User”) and has sufficient knowledge to bypass the guided process, the wizard shall allow the Customer to select specific actions or task (such as forms for specific permits, etc.). In no case shall the structured process hinder an advanced user to directly and quickly interact with the City or the County.</p>	
Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ■ Multiple application processes are in place, which can be confusing to Customers. ■ Customers must research where to submit their projects, and figure out who to contact if they have questions. ■ Customers must navigate multiple online portals and maintain multiple accounts. 	<ul style="list-style-type: none"> ■ Consider consolidating existing multiple online portals into one comprehensive portal for both City and County services to leverage wizard capabilities and provide a single point of entry for all customers. ■ Define, document and publish a decision tree for the Select a Service wizard that asks probing questions of the customer to determine the correct service. ■ Document the process steps and associated fees for each service in a customer friendly manner and make the relevant information available for the selected service.

3.2.2 Process: Pre-Submission Meeting

Pre-submission meetings are conducted to educate the Customer on the service’s application process and requirements, so the Customer is better prepared and will have fewer surprises down the road. The meeting also benefits staff in internally preparing for the upcoming submission. They can also validate the Customer’s proposed scope of work to ensure that it is of adequate detail, and prepare for workload balancing efforts internally based on projects identified in the pipeline.

Table 26. Pre-Submission Meeting Overview

Process: Pre-Submission Meeting	
<p>A system should support online request and scheduling of pre-submission meetings based on staff availability, and support scheduling with different City, County and external entities based on the project type. Virtual pre-submission meetings should also be offered as an option when scheduling.</p> <p>Pre-submission meetings should be required for project types that would benefit the most from these types of meetings, such as a commercial project that requires both significant site and building development activities. Based on the project type and the submitted scope of work, the online portal should automatically require (and prompt the Customer to request/schedule) a Pre-Submission Meeting before any plans can be submitted for the project. Additionally, based upon predetermined criteria configured in the system, required attendees for the Pre-Submission meeting should be automatically invited. These attendees should include a mix of both City and County representatives, as well as external stakeholders such as Fire and Charlotte Water, to reduce potential future confusion and conflicts.</p> <p>There may be scenarios in which a Customer (or staff) may request to waive a pre-submittal meeting. This request, along with justification, may be submitted through the online portal, routed for review, and granted approval/denial of request on a case-by-case basis.</p>	
Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ Pre-Submission meetings are currently optional, which can result in Customers bypassing this step when it is actually truly needed. ▪ The way Pre-Submission meetings are scheduled is inconsistent across the City and the Count (e.g., phone vs. email). ▪ External agencies report that the City and the County determine whether or not they should be invited to a meeting, and would prefer to make that determination themselves. ▪ There can be a significant lag time between scheduling the meeting and the next available meeting date, due to limited staff availability. 	<ul style="list-style-type: none"> ▪ Consider leveraging online scheduling technology that allows for customer requests and can automatically schedule pre-submission participants based on relevant expertise and availability <ul style="list-style-type: none"> ❑ Require Outlook calendar invitations to be automatically sent to City, County, and external stakeholder attendees upon scheduling of a pre-submittal meeting via the online portal requiring their participation ▪ Enact policy change to require pre-submittal meetings for selected project types (to be defined by City/County) ▪ Define and establish required City, County, and external stakeholder attendees required to attend pre-submittal meetings by project type (all stakeholders should attend one meeting together– not separate meetings, when logical) <ul style="list-style-type: none"> ❑ Based on input from the development community reported in the CSS

	<p>Customer Surveys, Gartner recommends that representation from Fire and Charlotte Water attend site-plan pre-submittal meetings.</p> <ul style="list-style-type: none"> ▪ Allow for virtual pre-submittal meetings, when necessary ▪ Develop a process for pre-submittal waiver requests and review. Establish clear criteria for waiver approval and denial.
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3.2.3 Process: Submit Application

A goal of the future state service delivery model is to encourage Customers to submit their applications online by providing a process that is user-friendly and more convenient than submitting an in-person paper application. Additionally, the consolidation of the multiple online portals that exist today, into one joint City and County online portal would further streamline the process.

Table 27. Submit Application Overview

Process: Submit Application	
<p>The application form should be tailored to the type of service selected, as well as the physical location of the Customer’s project, that will dynamically generate based on information entered by the Customer. The Customer should be asked to provide location information including, but not limited to the following methods:</p> <ul style="list-style-type: none"> ▪ Data entry of an address or parcel, which is systematically validated ▪ Selection of a parcel, geographic boundary, or address on a GIS map <p>Based on the location, a system should retrieve pertinent information about the location that informs the application process, such as zoning conditions or current projects associated with that location.</p> <p>The dynamic application continues to ask a series of probing questions to collect as much information during the application phase as possible, mimicking what a customer service representative would ask a Customer in-person when helping them submit an application. The Customer may be required to submit plans or payment as part of the application. These processes are discussed in upcoming sections.</p> <p>The Customer completes and submits the application. A system should perform an automated validation of the application (e.g., all required fields complete) and then route the completed application for processing.</p> <p>An in-person submittal process can also be supported, with City or County intake staff creating and data entering the application.</p>	
Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ Multiple application processes are in place, which can be confusing to Customers. 	<ul style="list-style-type: none"> ▪ Consolidate existing multiple online portals into one comprehensive portal for both City and County services ▪ Define all application types and associated application forms and

<ul style="list-style-type: none"> ▪ Customers must research where to submit their projects, and figure out who to contact if they have questions. ▪ Customers must navigate multiple online portals and maintain multiple accounts. ▪ Some application intake processes are manual and paper-based. ▪ Online payment is not accepted for some application types requiring an in-person visit by the Customer even when they can submit their application online. ▪ For some application intake processes, application form submission and plan submittal is a two-step process. 	<p>submittal requirements needed to support the Future State Service Delivery Model</p> <ul style="list-style-type: none"> ▪ Define routing rules for all application types for compliance review ▪ Define routing rules for all application types for final processing, including required plan reviewers
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3.2.4 Process: Modify Existing Project

Rather than submitting an initial application for a brand new project, a Customer may log into the online portal to take action on an existing project.

Table 28. Modify Existing Project Overview

Process: Modify Existing Project	
<p>When Customers log into the online portal, they will see a Customer dashboard that presents them with a list of available services and other relevant information to assist them in accomplishing their objectives. Examples are listed below:</p> <ul style="list-style-type: none"> ▪ Manage My Project(s) <ul style="list-style-type: none"> <input type="checkbox"/> Check Application or Project Status <input type="checkbox"/> View Project Information / History <input type="checkbox"/> Request an Inspection <input type="checkbox"/> Communicate with City or County Resources (e.g., link to email project contact(s) from the City or the County) <input type="checkbox"/> Modify my Application Request/Project/Permit <input type="checkbox"/> Address outstanding action item (e.g., submit revised plans) ▪ Financial Transactions <ul style="list-style-type: none"> <input type="checkbox"/> Pay My Bill <input type="checkbox"/> Outstanding Fees Due <input type="checkbox"/> Submit Payment <input type="checkbox"/> View Payment History <p>Once selected, a system should present a customized application form based on the action that he or she wants to take, with workflow enabled to support the transactions.</p>	
Current State Pain Points	Action Items to Achieve Future State

<ul style="list-style-type: none"> ▪ Customers must navigate multiple online portals and maintain multiple accounts. ▪ Some actions or requests require an in-person visit by the Customer, which can be inconvenient. 	<ul style="list-style-type: none"> ▪ Develop business rules for the modification of an existing application to determine what is permissible and when. ▪ Develop application modules that can be pieced together to customize applications based on customer-provided information.
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3.2.5 Process: Compliance Review

Upon submittal, workflow in a system routes the application to the appropriate staff to review for completeness and compliance with application requirements to ensure that only complete, quality applications are routed for further technical review.

Table 29. Compliance review Overview

Process: Compliance Review	
<p>City and/or County Intake Staff logs into a system and accesses the queue of submitted applications that have been assigned to them for review. A system should have the ability to automatically assign reviewers according to business rules. For example, a County-specific application (e.g., building permit application for a commercial project) could be routed to a County Intake Staff member, and vice-versa for a City-owned application (e.g., rezoning request within the City of Charlotte).</p> <p>If Intake Staff finds any discrepancies or requires additional information, a system should provide a standard template to document the additional information required and return the application to the Customer. Once the application review is complete and payment requirements have been satisfied, Intake Staff should update the application status indicating that it has been accepted. It is then routed to the appropriate personnel for further technical review and processing.</p>	
Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ There are inconsistent processes across the City and the County for compliance reviews. ▪ There are customers who submit incomplete packages and/or plans that are of low quality. This results in increased work for staff to resolve the issues. 	<ul style="list-style-type: none"> ▪ Define checklists for all application types to guide intake staff conducting compliance review ▪ Define and enact policy for consistent compliance review target duration across both City and County intake staff (e.g., 3 days to complete review and provide response back to Customer) ▪ Periodically report on and measure intake staff's adherence to defined performance metrics for compliance reviews

3.2.6 Process: Check Project Status Online

One of the major value propositions for the Service Delivery Model is to increase transparency and accessibility for the County and City's customers. Providing a single source of truth for a project's status will be key to accomplishing this objective.

Table 30. Check Project Status Online Overview

Process: Check Project Status Online

Through the online portal, Customers should have the ability to track the status of their application and project on an ongoing basis. A system should display information relevant to the user, including but not limited to:

- Pending applications (including ageing metrics such as date of submission, days in current review phase, status updates, application timelines, etc.)
- Remaining steps to completion
- Typical benchmarks for time to completion of City or County review.
- Pending actions, requests or other communications from the City or County.

Responsible City and/or County Contact(s)

Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ There is not one consolidated view of a given project. The status of the project and its tasks are distributed across multiple, disparate organizations. ▪ Customers must coordinate with multiple points of contact across the City, County, and other agencies to obtain information about their projects. 	<ul style="list-style-type: none"> ▪ Consider consolidating existing multiple online portals into one comprehensive portal for both City and County services ▪ Determine the information to be made available online to customers and/or other stakeholders. ▪ Determine the permissions rules for stakeholder access to information. (e.g., default permissions, owner-defined permissions, etc.)

3.2.7 Process: Record Internal Note

The objective of this process is to provide City and County staff with a tool to improve intra-agency communication, provide consistent City and County messaging to Customers, and to have a global view of all activity on a project.

Table 31. Record Internal Note Overview

Process: Record Internal Note	
<p>To improve intradepartmental communication, City and County employees should append general informational notes to records. These notes can be instructional or informational. This also supports tracking of interactions with the Customer, such as documenting that a representative spoke to the Customer, the date/time of interaction, and outcome of the conversation, including any pending action items.</p>	
Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ The City and the County work in separate systems (for the majority of services) and do not have visibility into, nor a detailed understanding of, each other's processes. ▪ While internal communication between personnel within the same agency (e.g., City to City communication, County to County communication) works well, communication between City and County personnel is not as satisfactory. 	<ul style="list-style-type: none"> ▪ Encourage City and County staff to record notes at various points in the service delivery process. ▪ Define policy for recording internal notes; may include use of standard "canned" comments vs. unformatted text entries.

<ul style="list-style-type: none"> ▪ There is not one consolidated view of a given project for the Customer. The status of the project and its tasks are distributed across multiple, disparate organizations. ▪ A single “government” coordinator does not monitor a given project due to the disparate process and multiple intake points. The customer must coordinate with multiple actors and/or check multiple websites to determine the status of their project, resolve issues, etc. 	
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3.2.8 Process: Submit Plans/Documentation

A Customer may be required to submit plans and/or other supporting documentation during the project’s lifecycle, including as part of the application process, the plan review and resubmittal process, or due to a Customer’s desire to make updates to his or her project.

Table 32. Submit Plans/Documentation Overview

Process: Submit Plans/Documentation	
<p>Online, a system should provide instructions and guidelines for plan submissions, including acceptable formats, level of detail, content requirements, sample scopes of work, and sample plan types to be submitted.</p> <p>The plans should be validated by Intake staff for completeness and quality as part of the Compliance review before being routed to a skilled plan review engineer to continue with the plan review process. A system should automatically perform version control.</p> <p>The City and the County will need to determine whether to continue to accept plans in paper format, and if so, dedicate City and County staff to scanning the paper plans into the system so that markup can occur electronically.</p>	
Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ Multiple systems are used to perform plan review across the County and the City, Customers must create multiple accounts and manage their project using different systems, and submit in both places. ▪ Some reviewing agencies still complete their review manually using paper plans. Townhouse residential plan reviews occur manually because they haven’t been configured in POSSE yet. ▪ Since the Customer is coordinating separately between multiple reviewing agencies, it is possible that there can be different versions of plans circulating. There is the possibility that the final version reviewed by the City is different than the final version reviewed by the County for example, and that this difference is not discovered until an 	<ul style="list-style-type: none"> ▪ Consider leveraging the City’s existing online submittal process. ▪ Determine the guidelines for plan submissions as described above. ▪ Define compliance review guidelines for intake staff. ▪ Define routing rules for all application types and plans for final processing, including required plan reviewers

<p>inspection is conducted. To prevent this, several workarounds are in place. The City can access plans that the County reviews to enable them to ensure plans match. For County Land Development plans, a check is performed before the Land Development hold is approved. For City projects that involved City Land Development, the City Zoning reviewers will check to ensure the drawings are the same.</p>	
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3.2.8.1 Request Expedited Plan Review Service

If the service is available *and* if the project is eligible, premium plan review services may be available to the Customer. The City and the County should determine the premium plan review services that will be offered to Customers and any constraints and/or business rules that impact when and how these services will be offered.

Table 33. Request Expedited Plan Review Service Overview

Process: Request Expedited Plan Review Service	
<p>The online portal should present the option for the Customer to request an available premium plan review service at the time of application submission if the Customer’s project meets the defined eligibility criteria. It can similarly be offered for in-person applications by staff. These premium services will be associated with appropriate fees that the Customer must pay.</p> <p>Examples of premium services that the City and County can offer are below:</p> <ul style="list-style-type: none"> ▪ <i>5 Day Expedited Plan Review</i> - An expedited plan review reduces the plan review cycle to 5 days. This is currently provided by both the City and the County. ▪ <i>1 Day Expedited Plan Review</i> - If the service is available and if the project is eligible, the online portal shall present the option for the Customer to request an in person, walk through plan review that will occur over a single review session. This is currently provided by only the County. ▪ <i>Same Day Expedited Plan Review</i> – This service is an in-person, same day review. Available appointments are given according to ‘first come, first served’ basis for that day. This is currently provided by only the County. <p>These premium services will come with various restrictions. For example, the project will be only allowed a limited number of review cycles and if they are not approved within that time, plans will be processed via the standard review cycle time for subsequent review cycles.</p>	
Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ Although the City and the County both currently provide expedited services, the names of the services do not clearly identify the premium service being provided. ▪ There are multiple expedited services, some that are provided by both the City and the County, and others that are only provided by one or the other. This can be confusing to Customers, and can also 	<ul style="list-style-type: none"> ▪ Define the premium services that will be available for selected project types and configure the option accordingly in the online portal. For example, a same day plan review option may only be available for small commercial projects if the County’s CTAC department continues to be the only staff that offer this service. ▪ Rebrand premium service names to match those identified by Gartner, above.

<p>result in a Customer expecting an expedited service only to be held up by other plan reviewing parties who do not provide the expedited service.</p>	<p>Gartner has refined the naming conventions previously used in order to ensure that the name of the process clearly conveys the objective of the process, and to ensure consistency across processes used both by the City and the County.</p> <ul style="list-style-type: none"> ▪ Consider the impact on resources in determining which project types will be available for premium service. Consider if resources can be allocated to provide such services or if such services can practically be prioritized. Consider making premium services available only during certain timeframes.
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3.2.8.2 *Submit Residential Master Plan*

To support a unique need of homebuilders, the County allows residential builders to create an electronic residential master plan, that can be reused and eliminates the need for duplicate of plan reviews. For example, if builders are building the same model of home over and over, it should not require a building plan review each time if nothing has changed.

Table 34. Submit Residential Master Plan Overview

Process: Submit Residential Master Plan	
<p>A Residential “Master Plan” would be a defined plan type in the new system. When this type of plan is submitted, the Customer will indicate whether this is the first time this master plan has been submitted, or if it has already been previously approved, and trigger the appropriate workflow.</p>	
<p>Once the initial plan is reviewed and approved, it is assigned a master ID number that future applications can reference. The individual residential projects will still need to go through a zoning review for the particular site location validation, but the plan itself can be reused.</p>	
Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ Residential homebuilders must utilize two different systems (E-Plan and the POSSE Contractor Online Portal) for the initial master plan submittal and subsequent submittal, respectively. 	<ul style="list-style-type: none"> ▪ Consolidate use of multiple legacy systems into one system or integrate existing systems to facilitate access to common data and plans.

3.2.9 **Process: Pay Fee**

At various points in the project lifecycle, a Customer will have to pay fees related to services obtained from the City or the County. Reducing counter traffic is a goal of the service delivery model, and the online portal should provide an easy, convenient, and secure method to pay for all application fees online or other related fees or fines.

Table 35. Pay Fee Overview

Process: Pay Fee

Customers will have the option to pay online or in person. All fees owed on a Customer’s account should be managed in a system. The online portal should accept all electronic methods of payment accepted by the City or the County.

Alternatively, a Customer will be able to pay in person, and a system will have cashiering functionality to support this process.

Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ Some application intake processes are manual and paper-based requiring in-person payment. ▪ Online payment is not accepted for some application types requiring an in-person visit by the Customer even when they can submit their application online. 	<ul style="list-style-type: none"> ▪ Consider consolidating existing multiple online portals into one comprehensive portal for both City and County services ▪ The City currently does not support credit card transactions online. Gartner recommends the City work with its Finance Department to explore options to provide this service to its Customers. ▪ Consider leveraging a single online payment gateway for all City and County payments. ▪ Determine if service fees will be levied and how those fees will be distributed.

3.3 Land Entitlement and Hearings Life Cycle & Supporting Business Processes

The Land Entitlement & Hearings Lifecycle step contains 3 supporting business processes related to processing zoning requests through formal hearings or administrative reviews.

Lifecycle Steps Supporting Business Processes

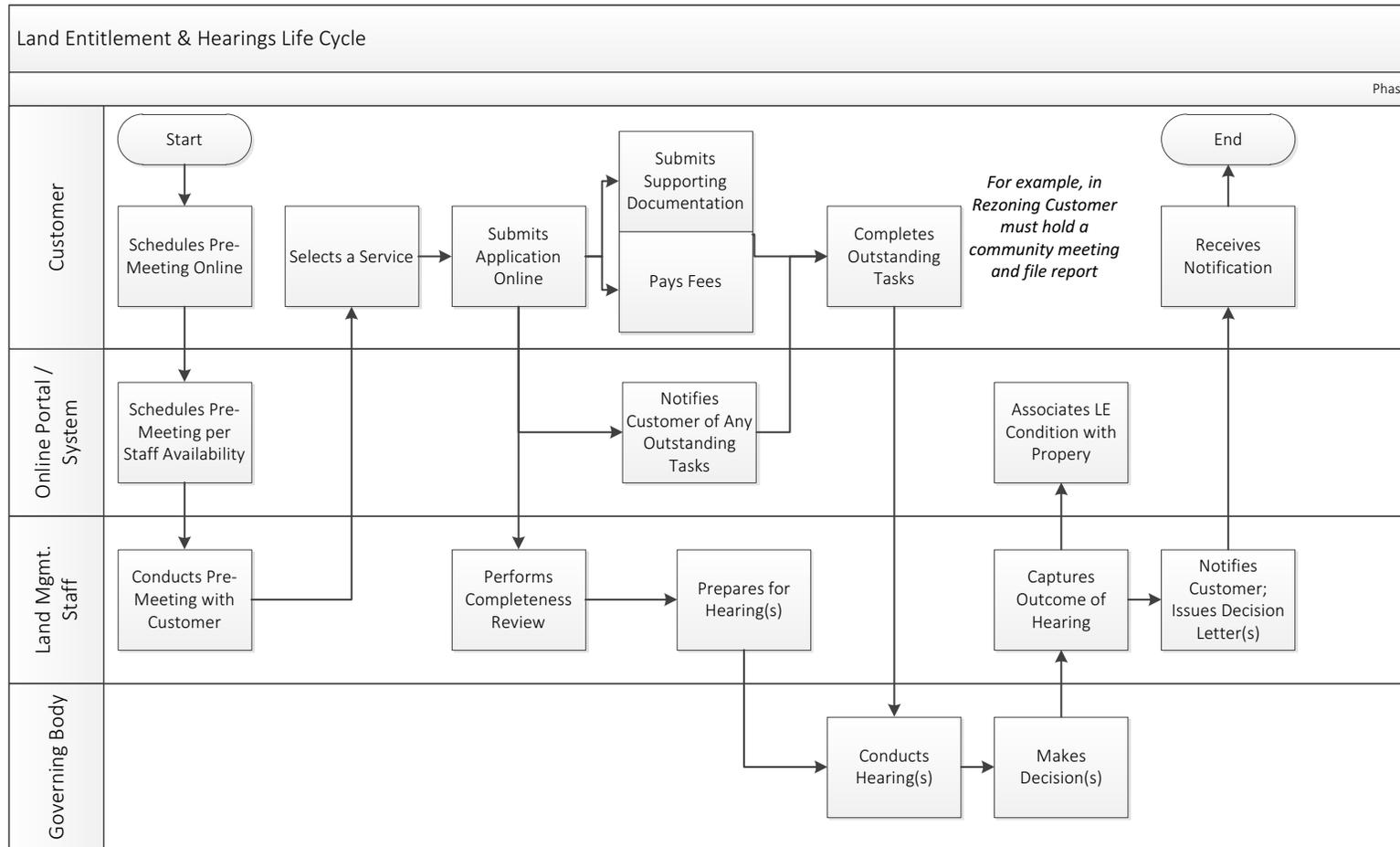


Land Entitlement & Hearings Life Cycle - Supporting Business Processes

- **Prepare for Hearing:** When a zoning application must be heard before a formal governing body for approval or denial, Planning Staff performs a number of actions to support the process.
- **Perform Administrative Review of Land Entitlement Application:** Some land entitlement applications can be evaluated internally through an administrative review, rather than the formal hearing process.
- **Capture and Enforce Land Entitlement Decision:** Upon the conclusion of a land entitlement review (formal or administrative), the outcome of the review must be captured in a system and associated with the property and project.

These business processes, as well as the supporting business processes from the Application Submission & Processing lifecycle, are illustrated in the figure below to provide an example of a project flowing through the processes. Projects differ from each other, and not every alternate path is illustrated in the diagram, but with defined Lifecycle Steps and Business Processes, the track each project will follow is still predictable, and can be measured, managed, and communicated.

Figure 41. Land Entitlement & Hearings Life Cycle & Supporting Business Processes



3.3.1 Process: Prepare for Hearing

Various City Staff supports governing bodies responsible for making decisions on Land Entitlement applications. Examples of land entitlement applications that go through a formal review are below:

- Conventional Rezoning, Conditional Rezoning, and Text Amendment requests are reviewed by the Zoning Committee and approved by City Council
- Requests for Zoning Variances and Appeals are reviewed and approved by the Zoning Board of Adjustment
- A residential or commercial project in a historic district may require City Historic District Commission review depending upon the characteristics of the project.

For the purposes of this section, the term “City Staff” shall be inclusive of both Planning and Historic District staff.

Table 36. Prepare for Hearing Overview

Process: Prepare for Hearing	
<p>City Staff is responsible for preparing for the hearing, which includes the following activities:</p> <ul style="list-style-type: none"> ▪ Supporting Customers in preparation for the hearing (e.g., answering questions) ▪ Post notices (e.g., rezoning sign) onsite ▪ Send out public notices as applicable to affected property owners. ▪ Analysis and formulation of a staff recommendation ▪ Build and distribute agenda for the hearing <p>The staff recommendation is presented to a governing authority, such as a Board who reviews the Staff Recommendation as part of their decision (approval/denial) on an application/case.</p> <p>There are a number of required tasks that the Customer must perform according to defined timelines. A system can help with tracking these tasks via a checklist.</p> <p>The agenda-building process is currently automated, supported by Granicus/Legistar. There is an opportunity to automate and track the remainder of the tasks performed by City Staff.</p> <p>Hearings occur at scheduled intervals (e.g., once a month). A system can provide scheduling functionality, that assists with the scheduling of cases to a hearing, including tracking the continuance of a case to be heard at a different, later hearing.</p>	
Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ At the time of current state discussions with Gartner, many of the land entitlement processes were manual and paper-based. Intake occurred in person. Plans and supporting documents were managed on shared network drives. 	<ul style="list-style-type: none"> ▪ Document all activities and tasks that must be performed by City Staff and customer from request to post-hearing documentation of outcome. ▪ Consider leveraging technology to automate the end-to-end process and track progress toward completing each task and activity. Offer visibility to staff and customers online. ▪ Determine business rules for triggering activities such as posting onsite, sending out public notices, building agendas, etc.

	<ul style="list-style-type: none"> ▪ Consider leveraging technology to give customers a channel (email or chat - in addition to phone or walk-in) to ask questions in preparation for the hearing. Ensure resources are equipped to respond to online queries.
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3.3.2 Process: Perform Administrative Review of Land Entitlement Application

Some Land Entitlement requests can be reviewed and approved by staff rather than having to go through the formal hearing process, referred to in this service as an “administrative review.”

Examples of land entitlement requests that can be supported through an administrative review include the following:

- Minor changes to a previously approved conditional rezoning can be performed by the City Planning Director or designee.
- Administrative deviations from the zoning ordinance may be approved by the City Zoning Administrator.
- A Customer can request an administrative interpretation of the zoning ordinance, which is responded to by Planning Department staff.
- A residential or commercial project in a historic district may not require a Certificate of Appropriateness and review by the Commission, and plans can be reviewed by Historic District staff.

For the purposes of this section, the term “City Staff” shall be inclusive of both Planning and Historic District staff.

Table 37. Perform Administrative Review of Land Entitlement Application Overview

Process: Perform Administrative Review of Land Entitlement Application	
Upon application submission and passing the compliance review, the request should be systematically routed to the appropriate Land Entitlement staff (e.g., Planning Department or HDC Staff) for review and decision.	
Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ At the time of current state discussions with Gartner, many of the land entitlement processes were manual and paper-based. Intake occurred in person. Plans and supporting documents were managed on shared network drives. 	<ul style="list-style-type: none"> ▪ Consider leveraging technology to intake applications and supporting documentation. ▪ Identify all land entitlement requests that can be approved via administrative review. ▪ Define routing rules for all requests so that appropriate reviewers can be identified and assigned.

3.3.3 Process: Capture and Enforce Land Entitlement Decision

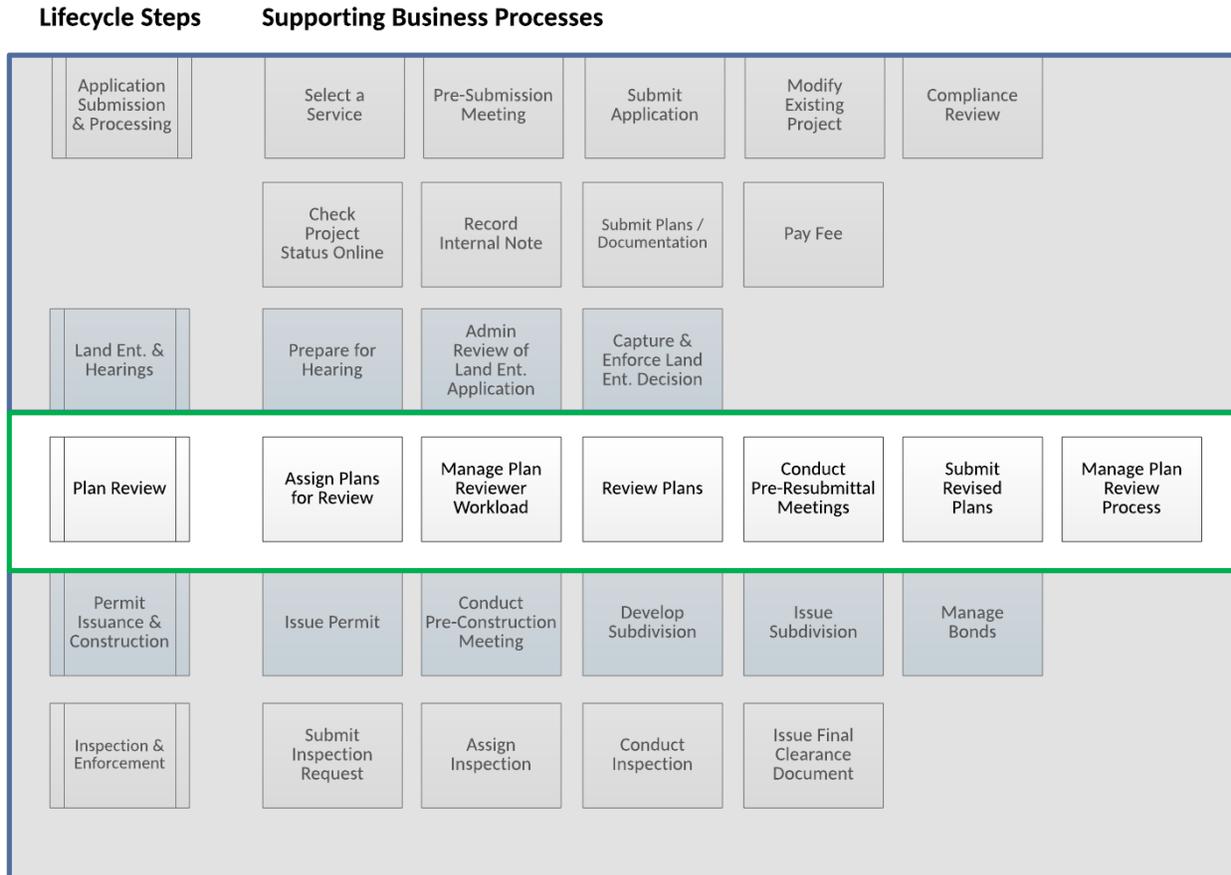
Once the Land Entitlement review has occurred, whether formal or administrative, the decision needs to be captured in the system and downstream activities initiated.

Table 38. Capture & Enforce Land Entitlement Decision Overview

Process: Capture & Enforce Land Entitlement Decision	
<p>For an administrative review, upon application submission and passing the compliance review, the request will be routed to the appropriate Land Entitlement staff (e.g., Planning Department or HDC Staff) for review and decision.</p> <p>For a formal request, once the hearing request has been submitted and the hearing has been scheduled, the hearing will be conducted by the appropriate governing body. The governing body will make their decision, and City Staff is responsible for updating a system with the results, comments, and/or conditions.</p> <p>For both administrative and formal reviews, a letter of decision should be systematically generated and issued to the Customer.</p> <p>Additional follow-up activities may occur specific to that project type. For example, if the request was for a text amendment, it is published to the web. A historic district review customer receives a placard for display on site.</p> <p>Going forward, a system should maintain oversight of future development activity occurring on a property governed by existing Land Entitlement conditions. Any downstream activity (e.g., building permit) occurring on a property (e.g., plat) must comply with any previously granted land development conditions (e.g., zoning, rights determination, annexation agreements, development agreements).</p>	
Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ At the time of current state discussions with Gartner, many of the land entitlement processes were manual and paper-based. Intake occurred in person. Plans and supporting documents were managed on shared network drives. 	<ul style="list-style-type: none"> ▪ Identify a means for which follow-up activities resulting from administrative and formal reviews are communicated to appropriate stakeholders so required action can be taken. ▪ Develop a process for which outcomes from the review are attached to the subject property, visible by staff and customers and checked to ensure downstream compliance when other activities are proposed. ▪ Configure workflow in the system to track any Land Entitlement conditions applied to the site against future building permit applications submitted for the location ▪ Automate notice generation upon entry of hearing or administrative decision in the system

3.4 Plan Review Lifecycle & Supporting Business Processes

The Plan Review Lifecycle step contains 6 supporting business processes related to the review of site and building plans, across all functional areas.



The Plan Review Lifecycle – Supporting Business Processes

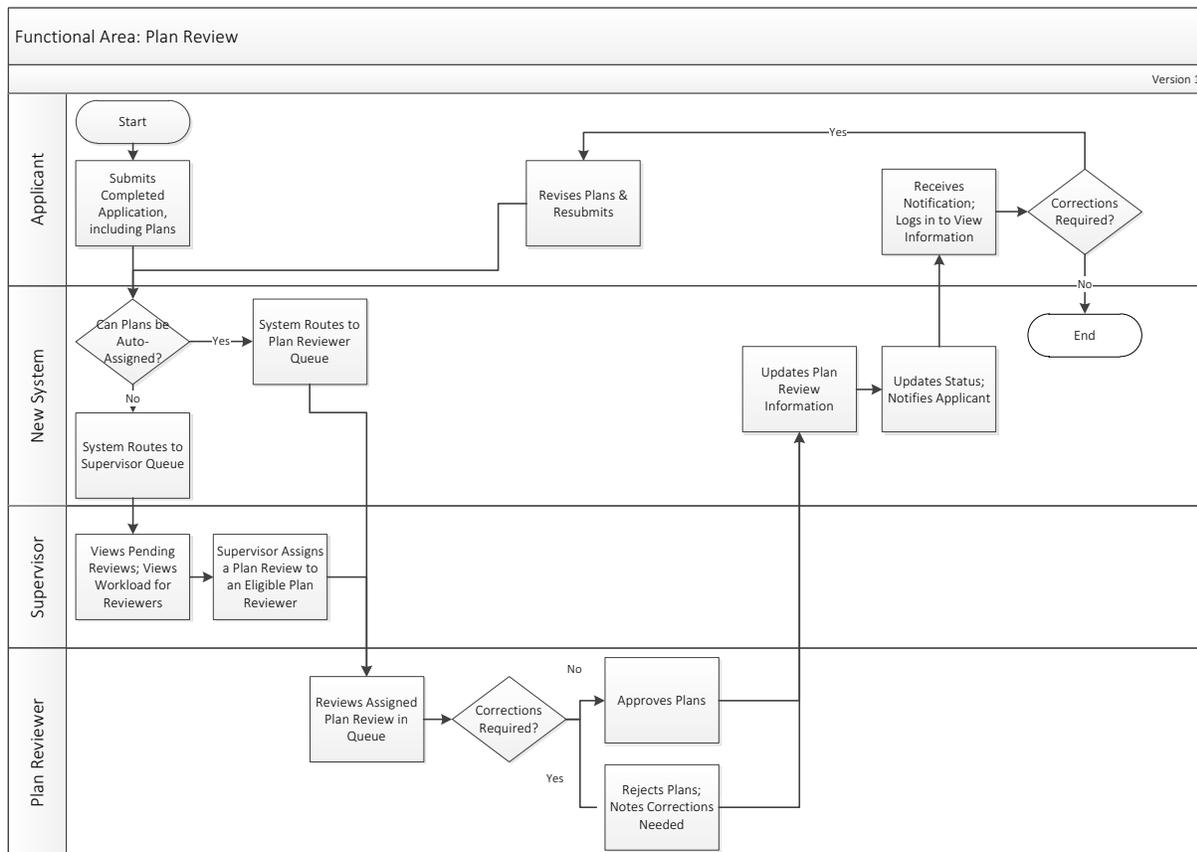
- **Assign Plans for Review:** When plans are submitted by the Customer they are systematically routed for detailed review to the appropriate reviewers according to pre-defined business rules in the system.
- **Manage Plan Reviewer Workload:** A Plan Review Supervisor will monitor the progress and status of his or her particular review staff’s case load and be able to manually make changes to workload assignments.
- **Review Plans:** The plans are reviewed, marked-up, and may go through multiple revision cycles until they are deemed complete. When using the term “plan review” in this section, it is inclusive of both site plans and building plans, unless otherwise stated.
- **Conduct Pre-Resubmittal Meetings:** These meetings shall be conducted as needed for complex or troubled projects, to require the Customer to identify how review

comments have been addressed in the new version of the plans, to help prevent further review cycles.

- **Submit Revised Plans:** If corrections and modifications are needed on the plans, Customers will need to revise and resubmit the plans.
- **Manage Plan Review Process:** The overall plan review process for a project requires oversight to ensure that it is completed successfully and efficiently.

These business processes coming together are illustrated in the figure below. Projects differ from each other, and not every alternate path is illustrated in the diagram.

Figure 42. Plan Review Lifecycle & Supporting Business Processes



3.4.1 Process: Assign Plans for Review

A system should route applications and associated plans to departmental reviewers based on business rules driven, workflow automation for the Customer’s project and the plan type they have submitted.

Table 39. Assign Plans for Review Overview

Process: Assign Plans for Review	
Workload assignments should be based on generic business rules such as discipline, skills, type of review, etc. A system should also have the capability of automatic routing and scheduling of plan	

reviews based on the type of plan, the weighted level of plan types and the availability of plan reviewers' schedules.

While such automated assignment may work in many cases, Supervisors will be monitoring workloads at all times and may make adjustments as necessary to ensure workload is distributed in the most efficient and effective manner (see next section).

Additionally, plan reviews can be manually assigned as needed.

Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ Knowing who to needs to review their plans, and subsequently who to submit to, is currently driven by the Customer. ▪ Due to an Applicant being able to begin the application for the building permit process with the County, there is potential for the Customer to proceed very far down the process without City Zoning approval. Although reportedly not an issue typically with most Commercial projects, the issue is more prevalent with Residential projects, it is still possible (statistic given was ~10% may have this issue). ▪ Plan Review assignment processes vary across the City and the County, as well as external reviewing agencies. Although external reviewing agencies can be assigned a plan review task in POSSE and EPM, some agencies do not have access to these systems, and manage their reviews outside of POSSE and EPM. ▪ A project hold is used in POSSE/EPM to ensure that a required review has taken place prior to issuance of a building permit. If a reviewer is added to a project in EPM, that agency is notified of the project and it is placed on the agency's "work plate" in EPM. City Staff proactively check their work plate for any holds associated with their review in EPM, however they do not have access to the application and plans modules of POSSE. Further, this process is not easy or convenient as staff needs to check multiple databases and projects. ▪ Customers can also see that reviewing agencies have been assigned, either through the EPM dashboard for the project manager, or the county website for owners/developers. If reviewing agencies are not proactively checking their "work plate", this can result in a review not 	<ul style="list-style-type: none"> ▪ Define routing rules for all application types for final processing, including required plan reviewers ▪ Create and maintain profiles for all plan reviewers to facilitate automatic assignment of plan reviews ▪ Based on feedback from the development community reported in the CSS customer surveys, Gartner recommends that field inspectors be involved in the plan review process early on in order to reduce discrepancies between what is approved in plan review and what is approved later, in the field.

<p>occurring until a Customer is investigating why there is a hold on their project.</p>	
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3.4.2 Process: Manage Plan Reviewer Workload

A Plan Review Supervisor will monitor the progress and status of his or her particular review staff's case load and be able to manually make changes to workload assignments.

Table 40. Manage Plan Reviewer Workload Overview

<p style="text-align: center;">Process: Manage Plan Reviewer Workload</p>	
<p>A system should grant the Supervisor visibility into any plan reviewer's workload, with the purpose of facilitating the quality and timely review of assigned plans within acceptable performance measures. The Supervisor may also flag/prioritize specific plans for expedited reviews.</p> <p>Whereas automated assignment based on configurable business rules should be the norm, a Supervisor should be able to proactively assign, monitor, and manage plan review workload across the plan review workforce to be able to identify potential scheduling or review challenges before they occur, as well as mitigate any schedule or review issues as they arise.</p>	
<p style="text-align: center;">Current State Pain Points</p>	<p style="text-align: center;">Action Items to Achieve Future State</p>
<ul style="list-style-type: none"> ▪ The City and the County both have systems in place to manage plan reviewer workload, however the fundamental difference in their approaches have led to different plan review approaches. The City operates on a first-in, first-out plan review approach, while the County has implemented On Schedule, which is appointment based. This can be confusing and frustrating to the Customer to have to manage different processes, and different plan review cycle times. 	<ul style="list-style-type: none"> ▪ After performing an alternatives analysis of OnSchedule and the First-In, First-Out (FIFO) plan review management approaches, Gartner recommends a transition to a FIFO plan review approach for both the City and the County, with consideration given to an alternative if the resources required to achieve enterprise FIFO cannot be secured. ▪ With appropriate staffing to handle the workload, service predictability can be achieved with a FIFO plan-review approach. However, Gartner understands that in order to support such an approach, the County may need additional experienced staff, which would likely require increased fees for customers. A transition to this approach poses several challenges: <ul style="list-style-type: none"> ❑ Finding and hiring experienced staff may not be easy. ❑ Establishing predictability will take time and can result in customer dissatisfaction in the meantime. ❑ Additional fees, especially if timelines are inconsistent, may result in customer backlash

	<p>Alternative:</p> <ul style="list-style-type: none"> • If gaining buy-in and securing the necessary human and financial resources required to implement the FIFO approach is not feasible, a hybrid approach that combines FIFO with an appointment-based approach for specific project types should be implemented. • Consider identifying clear criteria (e.g., project type, size, complexity, etc.) for appointment-based plan review and communicating to customers to ensure expectations are managed. • The hybrid approach, though, presents it's own challenges, as described in earlier slides, including complexity in technology implementation, and inconsistent customer experience, multiple touch points for OnSchedule projects and extended overall turnaround times for plan review.
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3.4.3 Process: Review Plans

During the plan review, the assigned Plan Reviewer(s) will mark up the plans, record conditions and clearances and – if necessary – request corrections from the Customer. When using the term “plan review” in this section, it is inclusive of both site plans and building plans, unless otherwise stated.

Table 41. Review Plans Overview

Process: Review Plans
<p>Upon assignment, a plan review task is assigned to a Plan Reviewer’s queue. The task may be assigned to one Plan Reviewer or multiple Plan Reviewers, in a serial or parallel fashion, depending upon the predefined workflow, the level of complexity of the desired service and/or other configured business rules for both the project type and the plan type. The types of plan review can also vary, from land development plan review, to building plan review, to subdivision plan review types.</p> <p>A system should display who the responsible party for the review is from all involved departments as well as the status associated with those reviews. A system should allow the Plan Reviewer to view alternate layers of the plans checked and marked by other Plan Reviewers from all involved departments.</p> <p>Upon completion, plan review results should be published to the online portal and available to the Customer. Completion of plan review should also trigger any downstream workflow, such as the lifting of a project hold.</p> <p>A project can require many different plan reviewers to collaborate on plan review for a project. There are different plan review types, with different goals and objectives. Further, the plan reviews can occur</p>

at different times in a project. For example, one Customer may proceed with site development long before building development. Another Customer may initiate a project that has both site development building development occurring almost concurrently. Regardless, the system’s workflow will allow plan review participants to review plans within one system, concurrently or consecutively as needed, providing consolidated plan review results to the Customer.

For the proposed future state plan review process to be successful, it is critical that as many reviewers as possible (City, County, Towns, Other Agencies) work within one system. Further, the processes for all reviewers should be consistent and not vary drastically from each other. Therefore, the future state plan review process proposed is a standard ‘cycle time’ process in which once the customer’s application and plans pass the compliance review, a plan review clock starts ticking. Plans are routed to the appropriate reviewers and they must complete the review within a specified amount of time (e.g., 30 days).

Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ Since multiple systems are used to perform plan reviews across the different reviewing entities, Customers receive review results a variety of different ways and/or must access multiple websites to view results and check plan review status. They also coordinate separately with external reviewing agencies who manage their review process manually in paper. ▪ The City, County, Towns, and other reviewing agencies all have differing plan review cycle times and processes. ▪ Since the Customer is coordinating separately between multiple reviewing agencies, it is possible that there can be different versions of plans circulating. There is the possibility that the final version reviewed by the City is different than the final version reviewed by the County for example, and that this difference is not discovered until an inspection is conducted. To prevent this, several manual workarounds are in place. The City can access plans that the County reviews to to help ensure plans match. For County Land Development plans, a check is performed before the Land Development hold is approved. For City projects that involved City Land Development, the City Zoning reviewers will check to ensure the drawings are the same. ▪ Customers report inconsistency between inspectors and interpretations of code standards, as well as inconsistency between plan reviewers and inspectors, according to the CSS customer surveys. 	<ul style="list-style-type: none"> ▪ For the County, consider transitioning from a scheduled plan review process in favor of a traditional First In, First Out approach. ▪ Agree on consistent plan review cycle durations and ideal number of review cycles for all services across all plan reviewing agencies. This decision should be informed by the recent report developed by the Site Plan Review Improvement Team, which consisted of representatives from the County, the Towns, and NCDOT. ▪ Proactively monitor performance metrics going forward to ensure customer satisfaction. ▪ Determine business rules for routing of plan reviews, concurrent review and handoffs between reviewers.

3.4.4 Process: Conduct Pre-Resubmittal Meetings

Prior to resubmitting, a pre-resubmittal meeting may be conducted to identify how the engineer addressed the agencies' review comments made on the previous submittal.

Table 42. Conduct Pre-Resubmittal Meetings Overview

Process: Conduct Pre-Resubmittal Meeting	
<p>Prior to resubmitting a revised version of plans, a Pre-Resubmittal Meeting may be conducted to identify how the engineer addressed the agencies' comments made on the previous submittal. The objective of these meetings is to reduce the potential for future review cycles. These meetings should be assigned to a project on a case by case basis by City or County staff.</p>	
Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ This process was named in the Site Plan Review Process Strategies for Improvement, a joint County/Towns/NC DOT report provided to Gartner in June 2015, as a way to increase staff availability to address site plan review comments and resolve or clarify issues all at one time in response to Customer feedback. Per the report, this was going to be implemented by July 2015. □ Per business rules provided in the Site Plan Review Improvement Report to Gartner, a pre-submittal meeting will be <i>encouraged</i> after the first cycle, and <i>required</i> after the second cycle. This does not apply to the review and approval process for Final Plats. For expansion to building plan reviews and adoption by City land development staff, this policy may need to be reviewed. 	<ul style="list-style-type: none"> ▪ Consider leveraging online scheduling technology that allows for customer requests and can automatically schedule pre-submission participants based on relevant expertise and availability <ul style="list-style-type: none"> □ Require Outlook calendar invitations to be automatically sent to City, County, and external stakeholder attendees upon scheduling of a pre-resubmittal meeting via the online portal requiring their participation ▪ Enact policy change to require pre-resubmittal meetings based on the number of review cycles that have occurred ▪ Define and establish required City, County, and external stakeholder attendees required to attend pre-resubmittal meetings by project type (all stakeholders should attend one meeting together– not separate meetings, when logical) ▪ Allow for virtual pre-resubmittal meetings, when necessary/possible

3.4.5 Process: Submit Revised Plans

If corrections and modifications are needed on the plans, the Customer will need to revise and resubmit the plans.

Table 43. Submit Revised Plans Overview

Process: Submit Revised Plans
<p>Customers will be notified when the plan review is complete and be able to log on to the online portal to view the detailed results. The results should include all the requested corrections, comments, and markups on the plans needed to inform them of what corrections to make. A system should also present contact information for the plan reviewer(s) who requested corrections, to allow the Customer to follow up with them if needed. Once the Customer makes the appropriate revisions, the Customer is allowed to resubmit the plans through the online portal. The plans are then rerouted to the appropriate</p>

reviewers and the process begins again. A system should support version control tracking of all plans submitted for the project, and allow reviewers to view previous versions and compare them to the new versions, and identify any differences.

The online portal should prevent formal submission of plans until a pre-resubmittal meeting has been conducted, if required.

In some instances, the Customer may need to make revisions to plans that have already been approved and considered complete, or make changes to an approved design once a permit has been issued for project construction (but the project is not yet finished). The Customer would log into the online portal and select to submit revisions to an approved plan. This submission type would trigger the appropriate workflow and notifications to the appropriate parties involved. A system would route the plans to the appropriate reviewers and the plan review process would begin again. If required, the system would prompt the Customer to pay a fee for this service.

Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ N/A 	<ul style="list-style-type: none"> ▪ Consider consolidating existing multiple online portals into one comprehensive portal for both City and County services ▪ Require a Pre-Resubmission Meeting prior to allowing resubmittal of plans, if required for that review cycle ▪ Define routing rules for all application types for final processing, including required plan reviewers

3.4.6 Process: Manage Plan Review Process

The plan review process can be complex, with many different plan reviewing agencies potentially involved. The process requires oversight to ensure that it is completed successfully and efficiently.

Table 44. Manage Plan Review Process Overview

Process: Manage Plan Review Process
<p>A system should automatically generate the required plan reviews for a project according to the business rules configured for that particular project type and plan review type. Manual plan reviews may also be assigned to a project. The system will prevent the project from proceeding past the plan review phase until all required parties have reviewed and approved the plans.</p> <p>A system should also track plan review metrics and should notify a plan reviewer if he or she has not completed the plan review within the prescribed timeframe.</p> <p>The Customer should also be able to see the reviews (completed and pending) on his or her project, by checking the project’s status via the online portal. If there are any actions that the Customer is required to take to address the review, they are displayed in the online portal.</p> <p>If a reviewing agency is not in the system (for example, the North Carolina Department of Transportation (NCDOT) is expected to continue a manual process) its review should still be tracked in the system and monitored. Gartner suggests that for eligible customer types and projects, assignment of a Project Advocate as part of the compliance review would provide a single point of contact to guide customers through the appropriate process and assist in communication with the various City, County, and other agency actors that the Customer must interact with to successfully achieve their objectives. The Project Advocate could be responsible for monitoring the response time of NC DOT and follow up</p>

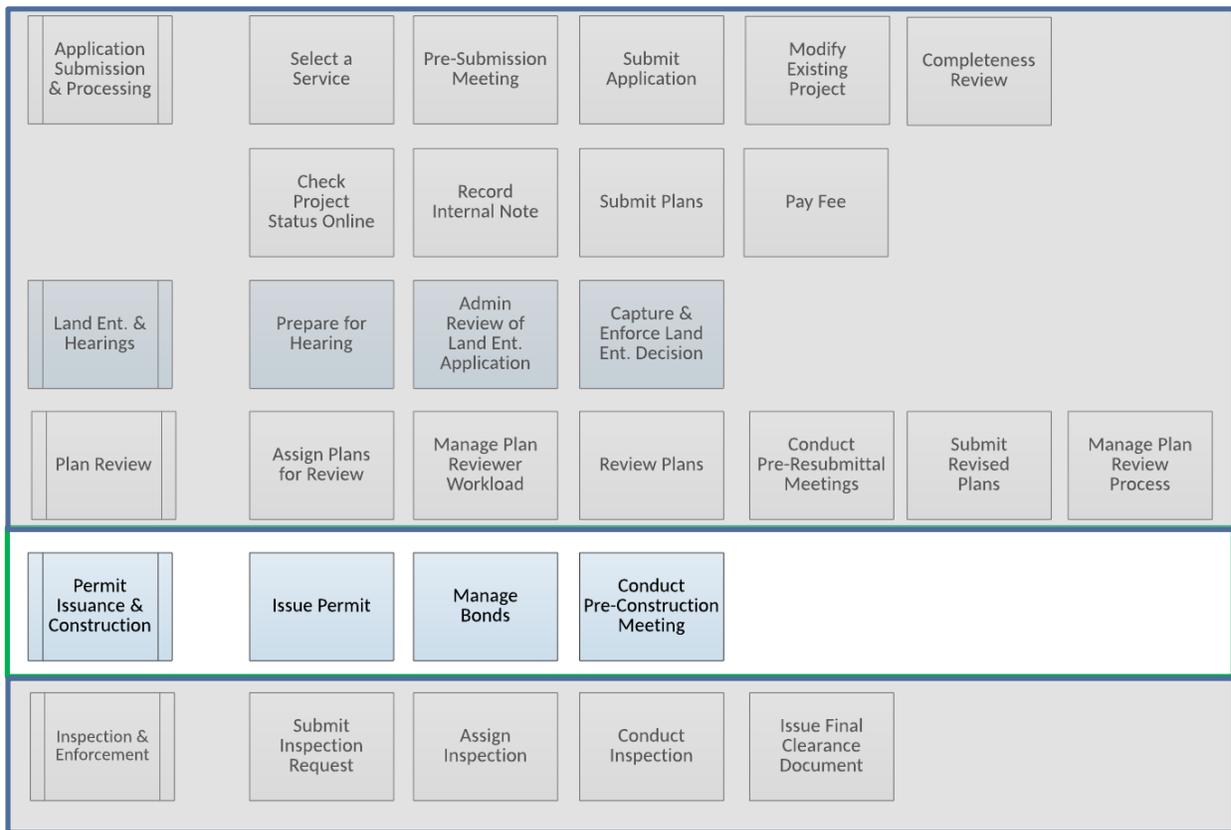
with them if they are close to missing their deadline, and also be responsible for logging the results of the NCDOT review in the system.

Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ A single “government” coordinator does not monitor a given project due to the disparate process and multiple intake points. The customer must coordinate with multiple actors and/or check multiple websites to determine the status of their project, resolve issues, etc. ▪ There is not one consolidated view of a given project. The status of the project and its tasks are distributed across multiple, disparate organizations. ▪ There are various channels to search (e.g., multiple websites), process entry points, and owners of processes (City, County, NCDOT, Town, etc.), which can cause frustration for the Customer when figuring out what to do or who to contact when in need of support. 	<ul style="list-style-type: none"> ▪ Identify the criteria for the holds, or ‘gates’ that enforce City and County checks and balances, or handoffs ▪ Perform a review and validation of the existing holds that are currently configured in the legacy systems, both at building permit issuance and CO issuance. ▪ There is an opportunity to provide a single point of contact for customers (Project Advocate/Shepard) and/or a single information source for project status and communication (Note: Technical questions would still need to be addressed by the individual agencies, but the Project Advocate could assist in coordination of response to the Customer).

3.5 Permit Issuance and Construction Lifecycle & Supporting Business Processes

Once an application is approved, a permit is issued that allows the requested activity to begin. The Permit Issuance & Construction Lifecycle has 3 supporting business processes, described in the following sections that support this lifecycle.

Lifecycle Steps **Supporting Business Processes**



- **Issue Permit** – Upon approval of the application and the completion of any other requirements, permits will be generated and issued to the Customer.
- **Conduct Pre-Construction Meeting** – These meetings can provide awareness to the Customer of typical challenges or other issues they should be aware of prior to beginning construction.
- **Develop Subdivision** – Upon approval of a subdivision’s preliminary plan, construction of streets and storm drainage can begin at that time if the developer desires. These items can have associated permitting and inspection processes.
- **Issue Subdivision** – Upon approval of the final plat, the subdivision is recorded and all related information stored in the system. At this point the lots in question are considered to be in accordance with the applicable subdivision ordinance, and building permits may be issued.
- **Manage Bonds** - There are various bond requirements for persons, firms, or corporations that are engaged in subdivision and construction with the City and the County. Process: Issue Permit

Once the application is approved and any other required criteria is met, a permit is issued that allows the requested activity to begin. The issuance of the permit may automatically trigger downstream activities supported by business rules driven workflow, such as the creation of a

clearance or project hold, which prevents issuance of a Certificate of Occupancy until the clearance is lifted by the assigned party.

Table 45. Issue Permit Overview

Process: Issue Permit
<p>Once all approval criteria have been met, permits are generated and able to be printed online. Configuration of business rules should allow permits to be automatically generated when possible. Upon generation, the customer should receive an automatic notification that directs them to go to the portal and print out their permit.</p> <p>The type of permit will drive the Service that will support its issuance. Types of permits that have unique characteristics and workflow are identified below. This is not meant to be a comprehensive list of all permit types, but rather to call attention to those that will require special handling and likely, unique configuration, in a system.</p> <ul style="list-style-type: none">■ Construction Permits (Building, Mechanical, Plumbing, Electrical, Demolition, etc.) are issued by Mecklenburg County Code Enforcement. In most cases these permits cannot be issued until the formal plan review process has been completed and clearances have been received from all required parties, which can include reviewing agencies outside of the County, such as the City, Towns, Fire, Health, etc. These will be issued via the services within the Development Service Category■ Grading Permits are issued by the City of Charlotte Land Development division to help protect water from sediment pollution during construction activities. These are issued during the site development phase of a project. These will be issued via the services within the Development Service Category■ Sign Permits are issued by the City Neighborhood and Business Services Department for installation of a sign at a business location to ensure compliance with Charlotte’s Sign Ordinance. These will be issued via the services within the Simple Permitting Services Category■ Zoning Permits are issued by the City Neighborhood and Business Services Department (i.e. Change in Use, ABC Permit, Temporary Tent, Periodic Retail Sale, etc.) and also provides Zoning Verification Letters. These will be issued via the services within the Simple Permitting Services Category.■ Driveway Permits for residential and construction projects will be submitted, reviewed, and issued by the services within the Development Services Category. <p>Some permits (residential or commercial trade permits) do not require a building permit or formal review, such as a plan review or zoning review. These permits can be applied for and issued automatically online after payment is received. Others may require an administrative review (typically a review of the proposed scope of work to confirm a formal review is not needed) and then the permits are issued. These will be issued via the services within the Simple Permitting Services Category.</p> <p>The City of Charlotte Department of Transportation owns a number of ancillary land development processes with separate permits that customers interface with through their projects that should be incorporated into the future state service delivery model. These can include any combination of the following:</p> <ul style="list-style-type: none">■ Right-of-way abandonment■ Right-of-way encroachment■ Right-of-way use permitting (for construction)■ Right-of-way leasing (for construction)■ Issues fence and wall certificates for fences or walls near or in the City Right-of-Way.

<p>Also, within the rezoning and commercial processes there are separate coordination activities for:</p> <ul style="list-style-type: none"> ■ Required traffic impact studies, ■ Air quality permitting with the county on large parking lots and parking decks, and ■ Developer agreements for installation or modification of traffic signals. 	
Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ■ Multiple online portals exist across the County and the City, and Customers must navigate to different websites and maintain multiple accounts to manage their project. 	<ul style="list-style-type: none"> ■ Consider consolidating existing multiple online portals into one comprehensive portal for both City and County services

3.5.1 Process: Conduct Pre-Construction Meeting

Pre-Construction meetings provide great value to Customers, allowing them to meet with all required parties at the same time and learn of any common issues or challenges early on in the development process.

Table 46. Conduct Pre-Construction Meeting Overview

Process: Conduct Pre-Construction Meeting	
<p>Customers should be able to request and schedule a pre-construction meeting online. Available time slots should correspond to required attendees' availability. Notifications and/or Outlook calendar invites should go out to required attendees automatically when a Pre-Construction meeting is scheduled.</p> <p>Pre-Construction meetings should be required for project types that are very complex.</p>	
Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ■ Pre-Construction meetings are currently optional, which can result in Customers bypassing this step when it is actually truly needed. ■ The way Pre-Construction meetings are scheduled is inconsistent across the City and the County (e.g., phone vs. email). ■ External agencies report that the City and the County determine whether or not they should be invited to a meeting, and would prefer to make that determination themselves. ■ There can be a significant lag time between scheduling the meeting and the next available meeting date, due to limited staff availability. ■ Customers report inconsistency between inspectors and interpretations of code standards, as well as inconsistency between plan reviewers and inspectors, according to the CSS customer surveys. 	<ul style="list-style-type: none"> ■ Consider leveraging online scheduling technology that allows for customer requests and can automatically schedule pre-construction participants based on relevant expertise and availability ■ Require Outlook calendar invitations to be automatically sent to City, County, and external stakeholder attendees upon scheduling of a pre-construction meeting via the online portal requiring their participation ■ Enact policy change to require pre-construction meetings based on the number of review cycles that have occurred ■ Define and establish required City, County, and external stakeholder attendees required to attend pre-construction meetings by project type (all stakeholders should attend one meeting together— not separate meetings, when logical)

<ul style="list-style-type: none"> ▪ County Code Enforcement has a high number of new, junior inspectors. ▪ Building code changes often, which creates educational challenges for both inspectors and customers. 	<ul style="list-style-type: none"> ▪ Allow for virtual pre-construction meetings, when necessary/possible
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3.5.2 Process: Develop Subdivision

Upon approval of a subdivision’s preliminary plan, construction of streets and storm drainage can begin at that time if the developer desires. These items can have associated permitting and inspection processes.

Table 47. Develop Subdivision Overview

Process: Develop Subdivision	
<p>Depending upon the objectives of a subdivision project, a developer may elect to construct streets, sidewalks, and/or driveways within the subdivision.</p> <p>Streets</p> <ul style="list-style-type: none"> ▪ As part of the bond release request, Customers must request a final inspection of the streets. The City Site Inspector conducts the final inspection. Upon confirmation that all required infrastructure is complete and meets City standards, a report is sent to the City Manager’s Office requesting acceptance of the streets. Upon approval from the City Manager’s office, the streets are accepted for City maintenance and written acceptance is provided to the developer. ▪ If a street is located within the extra territorial jurisdiction (ETJ) the street is not eligible for City maintenance and State Street Acceptance must occur. A final inspection is still scheduled with the City, as above, however, a State representative will also be present and acceptance will be reviewed by both the City Inspector and a NCDOT Inspector. ▪ For acceptance of streets within the Towns, the County handles the requests and performs the inspections with a Town representative. After the improvements have been approved, the County recommends to the Towns that they should take over the roads for maintenance. <p>Sidewalks</p> <ul style="list-style-type: none"> ▪ Sidewalks are constructed by the developer and inspected and approved by the City site inspector. <p>Driveways</p> <ul style="list-style-type: none"> ▪ Driveways for new Subdivision Residential projects, including driveways added to existing City or State maintained streets or modifications to existing driveway aprons are handled by CDOT 	
Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ Customer must interact with a number of government entities for permitting and inspection activities. 	<ul style="list-style-type: none"> ▪ Consider implementing inspection improvements described in the inspection business process section of this document.

3.5.3 Process: Issue Subdivision

A Customer’s proposal to subdivide land into two or more lots must be approved by the appropriate governing bodies before the actual dividing of land and construction can begin. Upon approval of the subdivision application and recording of the final plat with the Register of

Deeds office, the lots in question are considered to be in accordance with the applicable subdivision ordinance, and building permits may be issued.

Table 48. Issue Subdivision Overview

Process: Issue Subdivision	
<p>The subdivision application and approval process is an iterative process, where the Customer submits an initial sketch plan that is reviewed and approved, followed by a preliminary plan that is reviewed and approved, and finally a record map (Final Plat) is submitted by the Customer that is reviewed and approved. The final record map shows exact lot dimensions, street and sewer right-of-way locations, public storm drainage easements, and other information necessary to support deed and title work.</p> <p>The final plat goes through a review process, where required reviewers (e.g., City or County engineering department) review and approve the record map. The Planning Department then gives the Customer official approval to record the map. The final map is recorded with the Register of Deeds office by the Customer.</p> <p>Following recordation, the Customer can apply for a building permit and construction can begin on the land. However, subdivision does not always lead to vertical construction and a customer’s objective may be to simply divide land. Recordation may also trigger the Customer to initiate the bond process.</p>	
Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ Multiple submittal points for Customers. ▪ The City facilitates a review meeting with all reviewers to collect feedback. City staff then has to enter and scan all feedback into Accela, since not all reviewers work in Accela. 	<ul style="list-style-type: none"> ▪ Consider consolidating existing multiple online portals into one comprehensive portal and plan review solution for both City and County services

3.5.4 Process: Manage Bonds

There are various bond requirements for persons, firms, or corporations that are engaged in subdivision and construction with the City and the County.

Table 49. Manage Bonds Overview

Process: Manage Bonds
<p>Land Use Bonds</p> <p>Persons, firms or corporations engaged in construction, installation, maintenance, alteration or repair for which a permit is required, must file a continuous surety or cash bond to guarantee payment of fees and charges as well as indemnify municipalities against loss in the performance of duties for any damage to sewer or water pipes, or streets or sidewalks in the municipality.</p> <p>Anyone doing work within the corporate limits of the City of Charlotte and in Mecklenburg County is required to post a cash/surety bond. Currently business rules dictate that the minimum amount of the bond will be \$1,000 for work in the County only or \$2,000 for work inside the City of Charlotte corporate limits or for both the City and County. Bonds may be cancelled upon 30 days written notice and zero liability.</p> <p>The online portal wizard shall prompt the Customer to initiate the bond process if required as part of the application workflow.</p> <p>Bond Program for Developers and Builders of Subdivision Streets and Infrastructure</p> <p>Proper construction of streets and infrastructure is guaranteed with a bond/surety program managed by the City, or the County for development outside the City’s jurisdiction. The Land Development Bond</p>

Program affords developers and builders the opportunity to record subdivision plats and begin real estate transactions in the absence of completed required public improvements. The Land Development Bond Program is designed to ensure the completion of required public improvements to City or County Standards within two (2) years of initial surety posting.

The Bond Administration process includes the following major steps:

- Estimation - Estimation occurs within the Subdivision Plat Review process. Customers submit their request by submitting an online application via the online portal that is routed to City or County Land Development. Estimate is calculated using a standardized Surety Estimation formula. Customers must then post the bond or letter of credit.
- Release - Release is requested by filling out an online form that is routed to City or County Land Development. Upon release, a transmittal letter is automatically sent to the Developer or Builder along with a copy of the surety document. The original and a copy of the letter is sent to the Bank or Surety Company by Land Development.
- Renewal (if applicable) - Renewal letters are generated periodically. An annual renewal fee is required for sureties 4 years and beyond the original effective date. Fee and renewal application submitted to Land Development online.
- Reduction (optional) - Requests for reduction can be made at any time during the life of the project. Requests are submitted via the online portal using a standard form to City or County Land Development, with a copy of the plat and any revisions, along with fee(s).

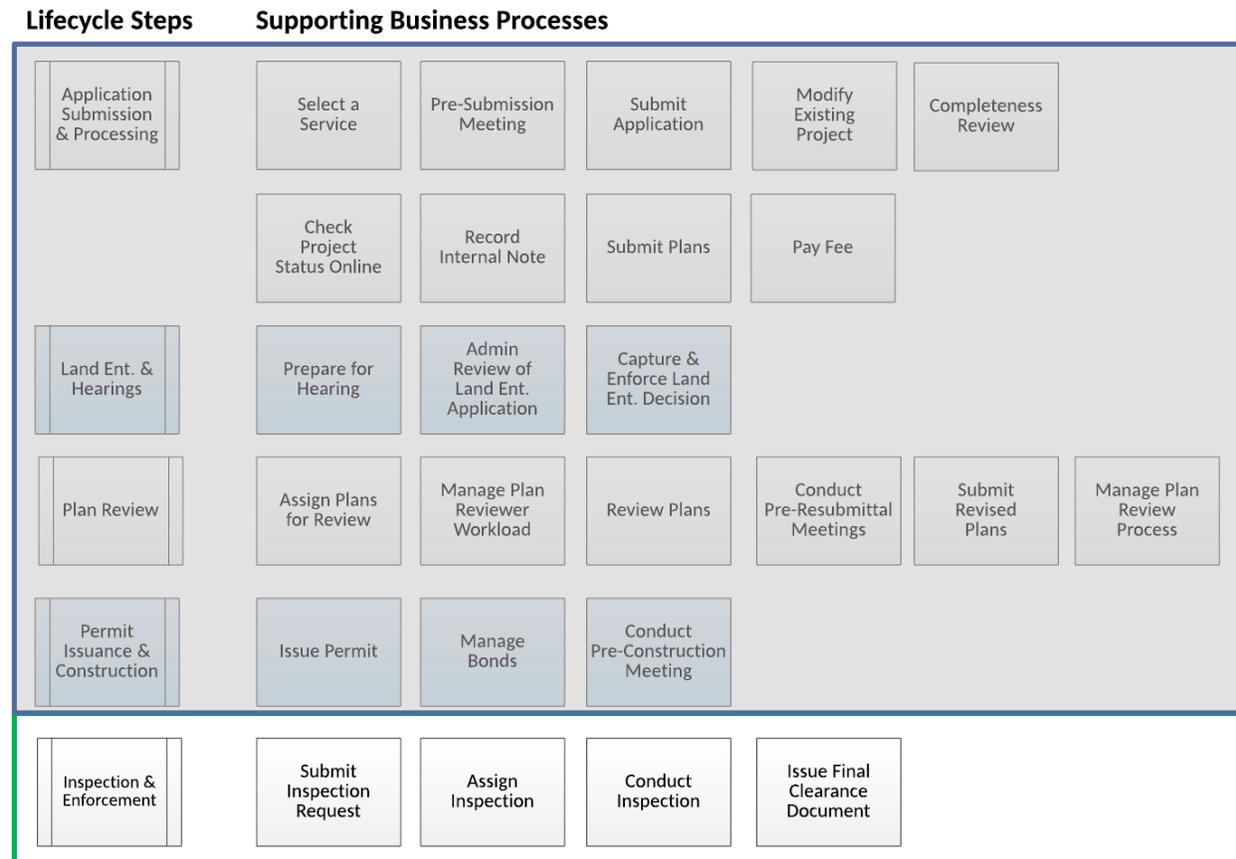
The online portal wizard shall prompt the Customer to initiate the bond process if required as part of the application workflow.

Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ N/A 	<ul style="list-style-type: none"> ▪ It is Gartner’s understanding that the bond processes are already automated in the City’s permitting systems. Upon selection of a future state technology solution in Program 6, the City and the County would need to ensure that the bond processes for both the City and County are automated.

3.6 Inspection & Enforcement Lifecycle & Supporting Business Processes

Once a permit has been issued by the City or the County, it requires a certain amount of oversight that is provided by the inspection process. The term inspection is inclusive of both site inspections and building inspections, unless otherwise stated.

This set of processes supports creating, scheduling, assigning, managing and conducting inspections, which are illustrated in the figure below:

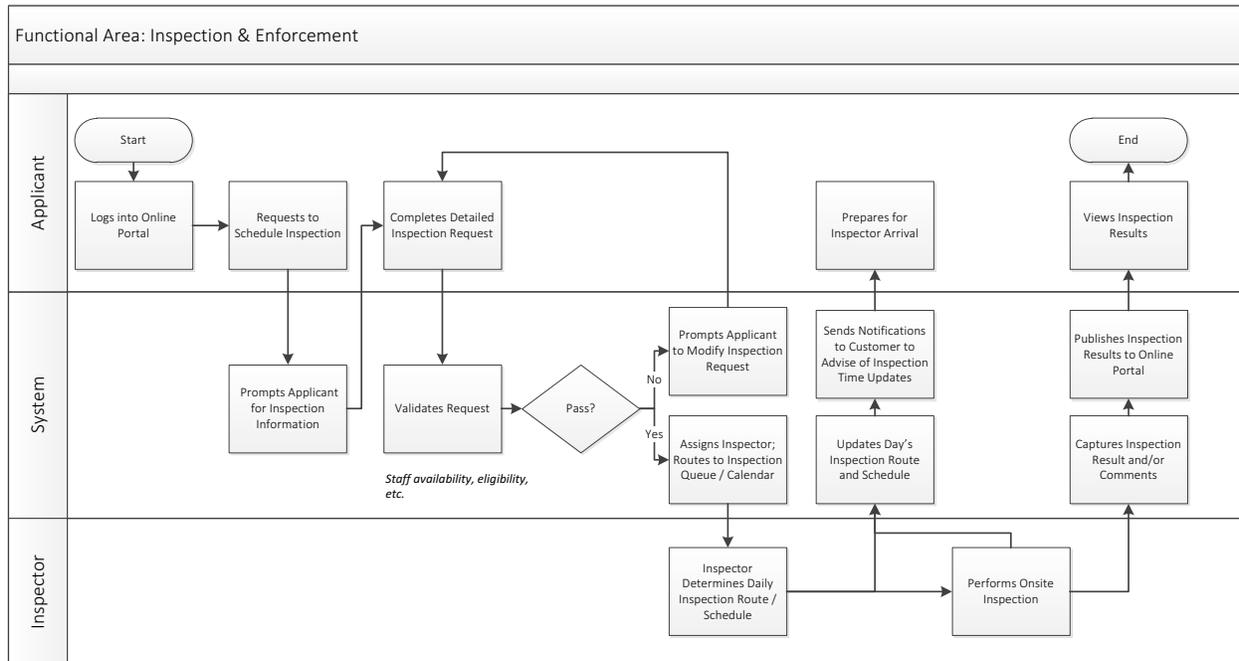


Inspection & Enforcement Lifecycle – Supporting Business Processes

- **Submit Inspection Request:** The Future State Service Delivery Model will implement standardized processes for requesting an inspection, across both the City and the County.
- **Assign Inspection:** Inspection requests will be systematically assigned, or assigned by a Supervisor, and routed to inspectors electronically.
- **Conduct Inspection:** Inspectors will conduct inspections and capture their results.
- **Issue Final Clearance Document -** Once all final inspections have been performed and all required clearances have been provided from each participating agency in the overall project, a Certificate of Occupancy or other final clearance document is issued.

These business processes coming together to support a project are illustrated in the diagram below. Every project is different and not all alternate paths are illustrated in the diagram.

Figure 43. Inspection & Enforcement Lifecycle & Supporting Business Processes



3.6.1 Process: Submit Inspection Request

To ensure consistency across the City and the County, as well as streamline the process for the Customer, the majority of inspection requests should be submitted through the online portal.

Table 50. Submit Inspection Request Overview

Process: Submit Inspection Request	
	<p>Customers should be directed to schedule inspections through the online portal as the standard procedure for requesting inspections. The online portal should be able to enforce eligibility criteria for inspection scheduling, such as:</p> <ul style="list-style-type: none"> ■ Only display eligible inspections for that project type. For example, the Customer should only be able to schedule an electrical inspection if he or she has been issued an electrical permit. ■ Enforce an inspection limit for particular day and other rules to ensure inspector availability and manage inspector workload ■ Prevent an inspection request when there are outstanding fees on an account and enforce any other eligibility criteria per business rules. <p>The online portal can provide transparency to Customers about the current volume of inspections scheduled and the next available appointment.</p> <p>The online portal should also prompt and require the Customer to provide information regarding access to the property if needed, such as Customer point(s) of contact for the inspection and specific property entrance or location information for the inspection.</p> <p>Various inspection types will have different workflow. For example, the following “premium” inspection services will have different workflow than a standard site or building inspection:</p> <ul style="list-style-type: none"> ■ Third Party Inspections: Allows for contracting with department-approved third parties on specific qualified projects.

<ul style="list-style-type: none"> ■ Inspection by Appointment: Customer applies for an inspection via the online portal and must pay an additional fee. Inspection request is confirmed and then conducted as requested. ■ Overtime Inspections - This is a premium service using existing staff on a volunteer basis. Customers are charged a premium fee above the permit fee. Request is made online at least 72 hours in advance and fee collected. Inspection request is confirmed and then conducted as requested. ■ Special Inspections - Special Inspections are a code-required quality control program. It addresses code compliance issues that directly affect life safety by engaging independent certified professionals to perform inspections throughout the construction process. If a project requires special inspections, a pre-construction meeting is required and is scheduled within 24 hours of an online request submitted by the Customer. 	
Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ■ Inspections can currently be requested a number of different ways across the City and the County, and across different departments within those agencies. ■ There is an opportunity to increase transparency about the inspectors' workload and volume of inspections to better educate the Customers on their availability. According to the CSS Customer Surveys, customers expect building inspections to be able to be conducted the next day following a request for inspection. Due to workload, inspections are averaging around a 1-3 day response time. 	<ul style="list-style-type: none"> ■ Consolidate existing multiple online portals into one comprehensive portal for both City and County services ■ Standardize inspection request processes across all inspecting agencies to initiate through the online portal ■ Define the premium services that will be available for selected project types and configure the option accordingly in the online portal. For example, an overtime inspection option may only be available for building inspections if the County's code enforcement unit is the only staff to offer this service.

3.6.2 Process: Assign Inspection

For scheduled, announced inspections a formal assignment to an inspector takes place.

Table 51. Assign Inspection Overview

Process: Assign Inspection
<p>A system should support both automated assignment (e.g., assigned to inspection based on geographic location and skill set), or manual assignment by Supervisor. Once an inspection is created in a system it should route inspection requests to an Inspector's queue based on business rules driven workflow automation. A system should enforce pre-defined business rules such as such as location, skills, type of review, etc. A system should interface with and sync to the inspector's Outlook calendar.</p> <p>Once assigned, the Inspector will be able to view the inspection on his or her work queue. The Inspector's information should also be published to the online portal, allowing the Customer to have contact information for the Inspector assigned to his or her project.</p> <p>For ongoing, proactive and/or unscheduled inspections this process would not be needed. An inspector would be able to create and log an inspection manually, following up as needed with the Customer. Reportedly site inspections are ongoing and currently the workload is light enough not to warrant formal scheduling. Inspectors are able to coordinate informally with the Customer. Inspection results will still be logged in the system and available for viewing in the online portal. A system should be able to support a formalized process, similar to that of building inspections, should the process warrant that in the future.</p>

Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> Currently inspectors and/or customer representatives receive a number of requests for inspections directly. Intaking the inspections through the portal and following a formal assignment process should help alleviate this issue and better manage inspector workload. 	<ul style="list-style-type: none"> Define routing rules for all application types for final processing, including required inspections Create and maintain profiles for all inspectors to facilitate automatic assignment of inspections Based on feedback from the development community reported in the CSS customer surveys, Gartner recommends that field inspectors be involved in the plan review process early on in order to reduce discrepancies between what is approved in plan review and what is approved later, in the field. Therefore, inspector assignment may need to occur earlier in the project's lifecycle. Incorporate all external inspecting agencies into the system so that inspection results from all required inspectors are within one system, performance metrics are monitored and tracked, and telephone-initiated requests for inspections are reduced.

3.6.3 Process: Conduct Inspection

The process “Conduct Inspection” applies to both building inspections and site inspections. Before a building can be built or land can be graded, the developer must submit land development plans for approval and the construction site must be inspected to protect nearby surface water and land. Site inspections occur during and after construction to ensure the project is built in compliance with applicable ordinances and standards. Building inspections are conducted to make sure that all construction work is done according to code. The objective of all inspections is to also ensure the life safety of future occupants of the building.

Table 52. Conduct Inspection Overview

Process: Conduct Inspection	
<p>The inspector conducts his or her assigned inspections for the day. Once the inspector has conducted his or her inspection, the inspector logs in the inspection outcome in the system, which may include pass (or partial pass) or failure of the inspection. A failure may require re-inspection.</p> <p>Inspection results are published to the online portal and accessible by the Customer. Inspection results may also trigger downstream workflow, as appropriate. For example, if all final inspections have been performed, this can trigger the issuance of a Certificate of Occupancy.</p> <p>In addition to conducting an inspection and logging the results, this process would include ancillary functions that accompany mobile inspections, such as inspection routing, downloading inspection data (codes and other required reference material, like plans), and researching information associated with the project and inspection.</p>	
Current State Pain Points	Action Items to Achieve Future State

<ul style="list-style-type: none"> ▪ There are a variety of places that the Customer has to navigate to view inspection results. ▪ Results can also be exchanged informally between the inspectors and the builders. Occasionally there can be miscommunication between the issues that are communicated to the owner by the builder (resulting in the County needing to clarify information with the owner). 	<ul style="list-style-type: none"> ▪ Incorporate all external inspecting agencies into the system so that inspection results from all required inspectors are within one system, performance metrics are monitored and tracked, and telephone-initiated requests for inspections are reduced.
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3.6.4 Process: Issue Final Clearance Document

A final clearance document, such as a Certificate of Occupancy, indicates that the building is in compliance with the appropriate ordinances and can be occupied.

Table 53. Issue Final Clearance Document Overview

Process: Issue Final Clearance Document	
<p>Once all clearances and final inspections have been satisfied successfully, from all required reviewing agencies, the final clearance document can be issued. Issuance of a CO may also trigger other final activities, such as final Customer invoicing, and/or triggering bond release. The steps required will be dependent upon, and vary, according to the project type. When possible, the CO should be available to be generated and printed online for the Customer once all the criteria are met for issuance.</p> <p>If it must be picked up in person, a notification should be sent to the Customer with all the appropriate instructions on where and when to obtain the document.</p>	
Current State Pain Points	Action Items to Achieve Future State
<ul style="list-style-type: none"> ▪ A single “government” coordinator does not monitor a given project due to the disparate process and multiple intake points. The customer must coordinate with multiple actors and/or check multiple websites to determine the status of their project, resolve issues, etc. ▪ There is not one consolidated view of a given project. The status of the project and its tasks are distributed across multiple, disparate organizations. ▪ There are various channels to search (e.g., multiple websites), process entry points, and owners of processes (City, County, NCDOT, Town, etc.), which can cause frustration for the Customer when figuring out what to do or who to contact when in need of support. 	<ul style="list-style-type: none"> ▪ Identify the criteria for the holds, or ‘gates’ that enforce City and County checks and balances, or handoffs ▪ Perform a review and validation of the existing holds that are currently configured in the legacy systems, both at building permit issuance and CO issuance. ▪ There is an opportunity to provide a single point of contact for customers (Project Advocate/Shepard) and/or a single information source for project status and communication (Note: Technical questions would still need to be addressed by the individual agencies, but the Project Advocate could assist in coordination of response to the Customer).