

# Project Plan

## City of McKinney

## Land Management System

Thursday, November 20, 2014

Prepared for:  
City of McKinney  
222 N. Tennessee St  
McKinney, TX 75070



## TABLE OF CONTENTS

<b>TABLE OF CONTENTS</b> .....	<b>2</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>3</b>
<b>SCHEDULE</b> .....	<b>3</b>
SCHEDULE SUMMARY.....	3
COST SUMMARY.....	4
<b>SCOPE OF WORK</b> .....	<b>5</b>
<b>ESTIMATED BENEFIT AND COST OF OPERATIONS</b> .....	<b>61</b>
<b>DIAGRAMS/DESIGNS</b> .....	<b>62</b>
<b>CONTRACTS</b> .....	<b>76</b>
TYLER TECHNOLOGIES CONTRACT.....	76
<b>BANKCARD SERVICES WORLDWIDE (BCSW) MERCHANT AGREEMENT</b> .....	<b>77</b>
<b>SIGNATURE PAGE</b> .....	<b>78</b>

## EXECUTIVE SUMMARY

The City of McKinney is implementing a state-of-the-art, integrated, and comprehensive “Development Services System” that supports Land/Parcel/Property Management, Customer/Owner/Applicant/Occupancy Management, Permit/License Management, Inspection Management, Code Enforcement, Animal Control, Customer Relationship Management, and a Capital Improvement Program (CIP). The purpose of this project is to make it easier for the City’s customers to do business with the City of McKinney and to improve the efficiency and effectiveness of the City’s operations.

Tyler Technologies’ Energov solution was selected as the software of choice as it is the most comprehensive solution meeting the City of McKinney’s requirements. Vendor selection adheres to the City of McKinney Purchasing Policy as well as Texas laws regulating the purchase of goods and services for government entities and the decision was unanimous after much deliberation was given over a fair and rigorous selection process.

This project is targeted to be complete within 18 months of Council approval at a cost estimate of \$3.34 million dollars over 5 years<sup>1</sup>. Both the Net Present Value (NPV) and Internal Rate of Return (IRR) are positive resulting in an affirmative recommendation for approval. Payback is anticipated in just over 4 years.

## SCHEDULE

### SCHEDULE SUMMARY



ID	Task Name	Duration	2014												2015					2016				
			Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May				
1	Planning & Fundamentals Training	59d	[Gantt bar from Dec 2014 to Jan 2015]																					
2	Analysis & Define	120d	[Gantt bar from Jan 2015 to Mar 2015]																					
3	System Configuration	240d	[Gantt bar from Mar 2015 to Jun 2015]																					
4	Testing	60d	[Gantt bar from Jun 2015 to Aug 2015]																					
5	Training	30d	[Gantt bar from Aug 2015 to Sep 2015]																					
6	Deployment	30d	[Gantt bar from Sep 2015 to Oct 2015]																					

<sup>1</sup> Despite the best-made plans, projections can change due to varying circumstances. Notwithstanding the project team is dedicated to meeting these objectives and will work to keep the project on track. Any variances will be managed according to the City’s change control procedures.

## COST SUMMARY

ITEM	Non Recurring Cost	Average Recurring Cost
Tyler Technologies Software Solution Professional Services, and Travel	\$1,266,303	\$136,766
Supporting Hardware/Software Infrastructure	\$325,220	\$114,584
Records Management Solution (December 16 Agenda Item)	\$150,000	\$30,000
Professional Services - Project Management (Projectus)	\$160,000	
<b>SUB-TOTAL</b>	<b>\$1,853,196</b>	
Contingency (100k)	\$100,000	
<b>TOTAL</b>	<b>\$1,953,196</b>	<b>\$251,351</b>
5 Year Total Cost of Ownership (TCO)	\$3,318,961	

## SCOPE OF WORK

---

### 1. Project Kick-Off, Project Management & Project Status

- 1.1. Project Kick-Off: The approved vendor shall conduct a formal project kick-off meeting at City premises to signify the start of project implementation, answer any questions and set expectations. The approved vendor shall provide 10 hard copies and 1 soft copy of the project plan that lists the work plan, schedule, points of contact, and any action items required by the City.
- 1.2. Project Management: The approved vendor shall provide project planning and management of the project with a Project Manager that serves as a Single Point of Contact (SPOC) and interacts with the City's designated Single Point of Contact. All project designs, scope changes and project issues shall be coordinated through each SPOC.
- 1.3. Project Status Meetings: The approved vendor shall conduct regular (weekly) project status meetings at City premises to discuss and resolve issues and jeopardy conditions, celebrate milestones, and communicate next steps. A Project Status Report that contains a disposition of issues and jeopardy conditions, highlights milestones achieved and lists any active action items shall follow within 1-business day of each status meeting.

### 2. Infrastructure

- 2.1. Vendor shall provide a Development Services System on City premises, hosted by the City.
- 2.2. Vendor shall identify the hardware, software, databases, licensing, and connectivity required to support the Statement of Work, end-users (front office), and administrators (back office) for the following environments:
  - 2.2.1. Production
  - 2.2.2. Training
  - 2.2.3. Test
  - 2.2.4. Development
- 2.3. Availability: The production environment must be designed for 24-hour per day and 7-day per week (24x7) high availability with load tolerance and real-time failover. The solution shall be supported on a Microsoft Windows Server Cluster environment and the database must be cluster-capable or aware. Maintenance should not disrupt service. System server and client software shall maintain its integrity in case of power failures and abrupt shutdowns. System shall be capable of restarting and recovering after system failure with no loss of data or software components. System shall integrate into the Citywide offsite disaster recovery infrastructure and provide a disaster recovery solution including a complete offsite server and networking installation that has the capability to roll from the primary site to this offsite location within a 24-hour recovery window. This includes: Individual physical or virtual server configuration and central data storage configuration (SAN or NAS). This roll over shall include all applications and data.
- 2.4. Integrity: The production environment must be designed with high integrity. The solution should be role-based and designed around the

- concept of "least privileged use". The solution shall provide audit trails for all successful and unsuccessful logins and administrative actions, log every action to a specific individual user, and have the ability to forward logs to a central logging server. System shall provide complete audit features for all transactions in all applications/modules of the system, including but not limited to:
- 2.4.1. Audit-tracking reports for user access and usage logs
  - 2.4.2. Tracking all log-ins and log-ins failures
  - 2.4.3. Transaction logs to record executed functions to facilitate diagnosis and reconciliation of system errors
  - 2.4.4. Full audit trail of every contact and contact history, together with each and every time a screen is accessed, by whom, when and where.
  - 2.4.5. Tracking all changes to system and administrative settings that could affect performance KPIs and reports.
- 2.5. Confidentiality: All environments must be designed with high confidentiality. No personally identifiable information (PII) will be stored unless it is encrypted in flight and at rest. The system shall provide the ability to encrypt selected data fields. The system shall support secure communications utilizing SSL over HTTPS for Internet based transactions and/or some form of data encryption for client/server transactions. The system shall provide application level security, including how it handles user or group security access configuration and enforcement in the following areas of the system:
- 2.5.1. Row/field level on data elements in databases
  - 2.5.2. Access to system functionality or modules
  - 2.5.3. Access to specific fields or screens in the user interface
- 2.6. System shall provide Google Analytics on all web based inquiries and events.
- 2.7. Solution shall be a GIS- and Web-based (n-tier) thin-client server application.
- 2.8. The City's environment utilizes a combination of physical server and VMWare 5.1 clustered host with High Availability (HA) and Dynamic Resource Scheduling (DRS). Preference is for a virtual environment. Each host is an HP Blade with 96GB Memory and 6 core processors connected to the network through HP's FLEX Fabric which can be handed out in any configuration. The VM environment runs on EMC's VNX Storage. Current versions of software and databases are:
- 2.8.1. Windows Server 2008 for 32 bit applications, and Server 2008 R2 and Server 2012 R2 (64-Bit) for all other applications (System shall not have any 16-bit Operating System dependencies)
  - 2.8.2. Microsoft Exchange Server 2010
  - 2.8.3. Client Operating System Windows 7 with some Windows 8 and IMAC/IPAD operating systems
  - 2.8.4. Anti-Virus is Microsoft Forefront Endpoint Protection
  - 2.8.5. SQL Server 2008 R2 (64-Bit) and SQL Server 2012 Database Servers (System shall utilize non-proprietary database technology).
  - 2.8.6. ESRI Arc GIS 10.1. Arc SDE and Arc Server are currently not installed.
  - 2.8.7. Microsoft Office 2010

- 2.8.8. Browsers: Internet Explorer (Current: 9.081112.16421, Updated: 9.0.25), FireFox (Current: 12.x)
- 2.8.9. Mobile devices: IPAD
- 2.8.10. VPN: AnyConnect version 3.1.04066
- 2.9. The solution shall be designed to support unlimited external users (customers), a total of 100 internal users, 60 of which are mobile users, and up to 75 concurrent users (employees, contractors, and appointed staff).
- 2.10. The system shall provide centralized user management, including logging (add, delete, change, access levels, etc.). The system shall support the use of directory services and authentication mechanisms such as Microsoft Active Directory or LDAP. The system shall integrate with Active Directory with the system user logon ID and password. The system shall provide users ability to change their own password. The system shall provide automated mechanisms to logout users based on an inactivity/idle timeout period.
- 2.11. The City's preference is that the solution release application security patches separate from application functionality patches/updates.
- 2.12. The solution shall not require any elevated database privileges or require any application processing on the database servers.
- 2.13. The solution shall be able to operate with Data Execution Prevention (DEP) and User Account Control (UAC) enabled for the Operating System and ALL applications.
- 2.14. The City prefers that the solution not store any data locally on end-user devices.
- 2.15. The City prefers that the solution not require any special permissions or local user accounts to operate and that the solution does not modify any local "hosts" file.
- 2.16. The solution shall not require any hardcoded or embedded passwords.
- 2.17. The solution shall not require the disabling, modification, or exceptions of any anti-malware or anti-virus products.
- 2.18. The solution shall not require a dongle or special internal/external cable/device.
- 2.19. The solution shall not require application components to be installed on critical infrastructure (i.e. domain controllers, mail server, database clusters and/or file clusters, etc.).
- 2.20. Vendors shall identify any services, scheduled tasks or other components that run continuously or on a schedule on the server and provide as much detail possible as to the memory, system resources, and users required for authentication that these components will consume.
- 2.21. The solution shall use email (e.g. for notifications, alerts, delivery, etc.) on a server, but not from a workstation, shall utilize SMTP and shall not require POP3 mail protocol.
- 2.22. The solution shall support routed TCP/IP networks and shall not require a protocol other than TCP/IP. System shall be Simple Network Management Protocol (SNMP) compliant. The solution shall not use multicast.
- 2.23. System shall require and support the implementation of City-wide Domain Name System (DNS) policies and standards to facilitate citywide connectivity.

- 2.24. The solution shall use 3G or 4G wireless connectivity and store-and-forward technology when mobile users lose wireless/internet connectivity in the field.
- 2.25. The City's preference is that the solution shall fit within a Service Oriented Architecture (SOA) application framework. System shall provide an open architecture for user and system interfaces based on current and industry-accepted standards, methods, and protocols such as HTTP, XML, SOAP, Cloud Storage, Evernote, etc.
- 2.26. System shall provide ability to easily upgrade to future operating systems, database and third party software and utilities.
- 2.27. System shall provide ability to provide non-proprietary extensibility using standard, commonly available web-based or Microsoft-based tools and languages (e.g., .Net, etc.) The City's preference is to not use Java.
- 2.28. The approved vendor shall provide a turnkey IVR solution utilizing the City's IVR system (Selectron). The IVR shall communicate with the City VOIP solution (Lync) and any other related components to support the overall City strategy and implementation. System shall provide softphone telephony functionality and support intelligent voice-data call transfers. System shall support, where appropriate, Session Initiation Protocol (SIP), CCXML, and other related call control standards.
- 2.29. System shall include configuration and support software and documentation that includes, but is not limited to:
  - 2.29.1. Application development tool kit (e.g., debugger, screen generator)
  - 2.29.2. Systems Administration and Management (user privileges, access and security administration, etc.) integrated with Microsoft Active Directory.
  - 2.29.3. Utilities and tools to monitor resource utilization
  - 2.29.4. Web development tool kit, including API's.
  - 2.29.5. System wide Entity Relationship Diagram (ERD) with documentation
  - 2.29.6. Toolkit manuals
  - 2.29.7. Report generation scripts/Change Control tools
  - 2.29.8. Legacy Data Migration (Extract, Transfer, Load – ETL)
  - 2.29.9. Report distribution tools
- 2.30. System shall provide incremental, differential and full backups and restore of the database, core and customized software, software and database configuration options, user preferences and rights, etc.
- 2.31. The system shall use SQL Server Reporting Services (SSRS), Crystal Reports or Tableau as the reporting engine.

### **3. General System Requirements**

- 3.1. System shall provide field level edit checks for transactions during data entry and provide immediate user feedback, including error messages and possible corrective actions (e.g. warnings when entering an invalid address, etc.).
- 3.2. System shall provide ability to design a preferred sequence to make data-entry columns and fields match the order of information in source documents.
- 3.3. System shall provide ability for data entry fields to default to the last entry.



- 3.4. System shall provide optional auto-fill capability for transaction/field entry throughout all modules.
- 3.5. System shall provide ability to minimize the necessity of the mouse when user performs data entry tasks.
- 3.6. Ability to use command buttons and/or hot keys that speed up data entry and program navigation.
- 3.7. System shall provide end-user productivity tools that allow for the following methods of using the system:
  - 3.7.1. Command-driven
  - 3.7.2. Menu-driven
  - 3.7.3. Drop-down lists for selection of valid responses
  - 3.7.4. Icon-based
- 3.8. System shall provide the ability to restrict free form entry (e.g., provide drop down calendar for date field).
- 3.9. System shall provide ability for users to add memo notes on any file or screen (e.g., through "text boxes") and attach documents with unlimited text area.
- 3.10. System shall provide ability to establish data validation rules to ensure data validity.
- 3.11. System shall provide intelligent spell-checking of text fields with ability to add to the dictionary. City's preference is to not have auto-correct.
- 3.12. System shall be available for on-line query and transactions 24-hours per day, 7-days per week and 365 days per year (24x7x365).
- 3.13. System shall provide staff the ability to perform data entry remotely on elements that pertain to their specific agency.
- 3.14. System shall provide ability to assign tasks to staff based on defined business rules. Applications are routed to reviewing agencies based on an established workflow.
- 3.15. System shall provide ability for the user to complete each step in the workflow process within a given screen (e.g., the user will not need to navigate multiple screens to complete a task in the workflow).
- 3.16. System shall provide ability to route work to the next person in a workflow based on process outcomes.
- 3.17. System shall provide ability to support workflow routing through e-mail (push) or on-line queries (pull) by a user for work that is in his/her queue.
- 3.18. System shall provide ability to enforce workflow rules (with task checklists) to ensure that processes are completed correctly.
- 3.19. System shall provide for comprehensive permit tracking including, but not limited to, logging of task status, contact history, issues, etc.
- 3.20. System shall provide ability to track events and due dates, and support notification of the appropriate parties about upcoming and overdue events (e.g., inspections). System shall provide ability to remind users about target dates for deferred submittal requirements for a project. System shall provide ability to remind users and applicants about target dates for case and plan review, re-check cycles, and requirements, and deferred submittal requirements for a project or activity.
- 3.21. System shall provide ability to support collaborative work activities.
- 3.22. System shall provide the ability for management to assign role and responsibility to staff (e.g. manager assigns a staff to receive supervisory level authority for one day, and the next day to assign the same staff to a different level of authority).

- 3.23. System shall maintain work history.
- 3.24. System shall provide ability to access various information, including parcel size, use codes, bedrooms, and other property characteristics based on user-defined parameters (e.g., information confidentiality)
- 3.25. System shall provide ability to modify appropriate data field that identifies applications for any given City-defined parameters.
- 3.26. System shall provide ability to issue and track site permits, including permits issued during multiple project phases.
- 3.27. System shall provide ability to maintain log-in and log-out details of plan checkers and approvals.
- 3.28. System shall provide ability to use indicators to identify other City agencies, such as housing authority projects, redevelopment agency projects, etc.
- 3.29. System shall provide ability to submit and track changes, e.g. to correct clerical errors, change of contractors, change of architects, etc.
- 3.30. System to track staff comments, determinations, conditions of approval during plan review, inspections and processes.
- 3.31. System shall provide ability to display or identify search fields to assist user in quickly locating projects or applications when performing searches (e.g., permit number, project address, project name, application date range, etc.).
- 3.32. System shall provide a checklist of requirements to guide users through the submission process.
- 3.33. System shall provide field-level help, extensive validation, and clear error messages for users.
- 3.34. The system shall provide ability to incorporate business and processing rules including validation of information entered (i.e. unable to submit unless all checklist items are fulfilled).
- 3.35. System shall provide ability to capture and access information about an application during pre-application discussions and research including, but not limited to, the following:
  - 3.35.1. Applicant, owner and engineer contact info including, but not limited to name, email, and phone number
  - 3.35.2. Project name and description
  - 3.35.3. Parcel dimensions and configurations
  - 3.35.4. Parcel types
  - 3.35.5. Parcel splits, including genealogy; and combinations
  - 3.35.6. Previous parcel number(s)
  - 3.35.7. Recorded history of parcel, including prior lot designation and tract numbers
  - 3.35.8. Districts, including fire, water, school, and special districts
  - 3.35.9. Parcel status
  - 3.35.10. Zoning District, including zoning regulations under development and whether the parcel is in an adopted or under-development plan area
  - 3.35.11. General Plan and use description
  - 3.35.12. Historic status according to rating, landmark designation, within an "Area of Primary Importance", and/or potential resource
  - 3.35.13. Variances
  - 3.35.14. Existing applications and permits associated with the parcel, address or person

- 3.35.15. Previous building applications, permits, and code compliance cases
- 3.35.16. Previous zoning applications and their status, including conditions of compliance and whether conditions were one-time, ongoing, and were met
- 3.35.17. Map site photocopy or image
- 3.35.18. Special setbacks, subdivision conditions, and supplemental land use standards for the parcel
- 3.35.19. Multiple parcel numbers associated with a zoning application
- 3.35.20. Results of any technical reviews and assessments, including summary of declarations and findings
- 3.35.21. Any complaints associated with the parcel, address or person
- 3.35.22. Description of proposed and approved projects and applications associated with the parcel or address.
- 3.35.23. Outstanding fees on the parcel, address or entity
- 3.35.24. Contact log, including phone calls and emails
- 3.35.25. Associated photos, technical reports and documents
- 3.35.26. Records and notes from prior contact(s) and conversation(s) with applicant
- 3.35.27. Record drawings of all existing improvements including paving and underground utilities within, adjacent to and associated to the project area
- 3.35.28. Phase Information
- 3.35.29. Type of development/project scope
- 3.35.30. Associated planning case numbers and approval status of these cases
- 3.35.31. Planning case dates for City Council and Planning & Zoning (P&Z)
- 3.35.32. Planner assigned to associated cases
- 3.35.33. Connections to other departments' cases including planning, building inspections, code, fire and finance
- 3.35.34. Number of lots
- 3.35.35. Acres
- 3.35.36. Location
- 3.35.37. Whether it is in the city or Extraterritorial Jurisdiction (ETJ)
- 3.35.38. Pre-development meeting date
- 3.35.39. Engineering case must be linked to associated public infrastructure improvements so that you can search a case and determine what infrastructure was built, or you can search the infrastructure and determine what case it was tied to
- 3.35.40. Same ability to search creek improvements
- 3.35.41. Platting status
- 3.35.42. Reviewing engineer
- 3.35.43. Facility agreements
- 3.35.44. Traffic impact analysis (TIA), both for the individual project and overall master development TIAs
- 3.35.45. Traffic control plans
- 3.35.46. Flood studies
- 3.35.47. Geotech reports
- 3.35.48. Detention requirements

- 3.35.49. Previous plans reviewed and/or approved for the same site
- 3.36. System shall provide warning messages when user attempts to start a new permit, case or activity, including automatic notification of conditions that apply (e.g., Homeowner's Association approval, height restrictions, biological habitat areas, Code Enforcement violations, etc.).
  - 3.37. System shall provide ability to record when the applicant has met conditions.
  - 3.38. System shall provide ability to retrieve related historical information and conditions regarding a pre-development application during the plan check process, entitlement review process, or subsequent application processes.
  - 3.39. System shall provide the ability to facilitate an expedited review process.
  - 3.40. System shall provide the ability to add flags at the parcel, project, and/or permit/license level. The flag would be customizable and would prevent certain events from occurring until signed off.
  - 3.41. Preliminary review of application is performed based on an established list of mandatory code requirements and State and local legislation.
  - 3.42. System shall generate an application or case number to be used in tracking and referencing the application.
  - 3.43. System shall provide ability to identify each step in the plan development process (e.g., drafts, reviews, noticing, hearings, etc.) for each type of plan (e.g., area plans, general plan revisions, etc.).
  - 3.44. System shall provide ability to track working time (i.e. hours worked) and elapsed time (i.e. calendar days) associated with each step of the plan development process and with completion of the entire plan.
  - 3.45. System shall provide ability to use baseline data on working time and elapsed time for each plan type (e.g., general plan revisions, area plans, neighborhood plans) to forecast resources required for each step of the plan development process and for completion of the entire plan.
  - 3.46. System shall provide ability to use baseline data on working time and elapsed time for to set standard timeframes for each step in the plan development process for each plan type.
  - 3.47. System shall provide ability to increase accuracy of resource and timeframe forecasts by adding data collected for each completed plan to the baseline data.
  - 3.48. System shall provide ability for administrator to override standard timeframes for each step in the plan development process. System to provide flexibility for supervisor over-ride for scheduling and approvals.
  - 3.49. System shall provide prompts and notices prior to due dates for each step in the plan development process.
  - 3.50. System shall maintain baseline but provide ability to automatically re-set timeframes for subsequent steps in the planning process based on actual completion dates for previous steps on the critical path of the workflow.
  - 3.51. System shall provide ability to OVERRIDE the automatic re-set of timeframes for subsequent steps in the planning process based on actual completion dates for previous steps.

- 3.52. System shall provide sufficient security so once the authorized City staff determines the final list of conditions to be applied to a project or activity, other users in system may not delete or alter such conditions.
- 3.53. System shall provide ability to record final determinations on projects/applications and record conditions that apply to:
  - 3.53.1. Property and future subdivisions of that property
  - 3.53.2. The project as a whole (e.g., traffic conditions)
  - 3.53.3. Future permits (e.g., all buildings must not exceed a height requirement)
- 3.54. System shall provide unlimited amount of text space for the user to describe each condition.
- 3.55. System shall provide a list of user-defined conditions that can be selected from a pick-list or drop-down box to ease data entry when standard conditions are selected.
- 3.56. System shall provide ability for user to retrieve information about a particular project or activity by searching on any of the user-defined fields including but not limited to:
  - 3.56.1. Block and Lot
  - 3.56.2. Address (by actual, range, and street names)
  - 3.56.3. Type of pre-development process
  - 3.56.4. Project summary (text)
  - 3.56.5. Applicant
  - 3.56.6. Resolution number (planning commission, City Council or site plan)
  - 3.56.7. File number (where application materials are filed)
  - 3.56.8. Date of decision
  - 3.56.9. Conclusion summary (text)
  - 3.56.10. Uses, including primary and accessory uses
  - 3.56.11. Business Name
- 3.57. System shall provide ability for each condition to be associated with the department and/or user that issued the condition.
- 3.58. Ability to have customization options by log-in. (Example: Saved query formats, starting screen, bookmarks, screen flow etc.).
- 3.59. Ability to process electronic stamps.
- 3.60. System shall provide the ability to post data entry for case activity or the notice as a draft prior to being posted on the internet or available as the public record.
- 3.61. Ability to set up a variety of internal user roles and specify what access a user with that role has.
- 3.62. Ability to increase a batch of selected fees based on a percentage basis that will go into effect based on an effective date.
- 3.63. Ability to configure robust fee calculations, as well as create custom fee formulas for calculation.
- 3.64. Ability to add a comment to a fee line item.
- 3.65. Ability to add/remove/update any fees easily and in a timely manner. Be adaptable and flexible to incorporate any new fees and fee structures based on new ordinances.
- 3.66. Prevent ALL users from deleting any fee that has a partial or full payment against it.
- 3.67. Ability to provide customer refunds, credits, or voids with staff review.
- 3.68. Ability to take overpayments.

- 3.69. Ability to provide automated warnings and/or holds based on NSF checks or delinquent accounts (hold at the customer level).
- 3.70. Ability to define fees and fee schedules.
- 3.71. Ability to support the use of City's GL accounting code structure and associate with individual fees.
- 3.72. Ability to update fee rates in an Excel-like table, and apply those rates to permits/licenses and cases based on effective date.
- 3.73. Ability for internal user to review calculated fees and make adjustments prior to final billing.
- 3.74. Ability to accept and process fee payments online and over the counter (including application fees, plan check fees, inspection fees, etc.).
- 3.75. Ability to validate that full payments have been received before issuing permits/licenses.
- 3.76. Ability to provide/allow multiple payment types (e.g., credit card, cash, escrow, etc.).
- 3.77. Ability to select a fee code from a drop down to calculate fee but also to allow manual override of fee amount if necessary.
- 3.78. Ability to retain historical fee schedules that are no longer active.
- 3.79. Ability to recalculate, log and display all changes to fees regardless of status of permit/license.
- 3.80. Ability to generate fees based on calculated and/or submitted valuations, defined quantities, or other business rules.
- 3.81. Ability to generate a valuation of work based on defined information fields and apply modifiers if required based on business rules.
- 3.82. Ability to automatically generate review and inspection fees based on time spent.
- 3.83. Ability to calculate, assess, and track penalties associated with an event, geographic location, parcels, person, or business.
- 3.84. The ability to manually adjust the date used to calculate fees, when necessary.
- 3.85. Void payments process on current day rather than the original payment date.
- 3.86. Ability to enter and track time worked on any workflow item (review, inspection, etc.) by any staff users in any division and automatically generate a fee based on that data (with administrative configuration).
- 3.87. Ability to handle escrow accounts.
- 3.88. Ability to add fees in a predefined order (some fees are calculated based on the amounts of others).
- 3.89. Ability to manage a comprehensive list of fees using multiple formulas/algorithms, identified and developed by the City, (e.g. fees by the hour, fees by the inspection, fees by square footage, fees by valuation, etc.) based on code requirements of various agencies/departments.
- 3.90. Support for on-line calculation and collection of fees.
- 3.91. Ability to capture activity-based costing.
- 3.92. System shall auto-calculate application fees based on case type, acreage, lot numbers, and other pre-determined factors.
- 3.93. System shall provide ability to allow fees to be revised based on change in scope.
- 3.94. System shall provide ability to support the use of City accounting codes associated with fees.

- 3.95. System shall provide ability to track time and expense and integrate fee calculation and collection capability associated with a permit, cases or complaints including allowing users to review and amend fees at permit application time.
- 3.96. System shall provide ability to track time worked on any review and inspection activities.
- 3.97. System shall provide ability to retain historical fee schedules that are no longer active.
- 3.98. System shall provide ability to change the form type (project type) prior to permit issuance and recalculate fees.
- 3.99. System shall provide ability to calculate fees for an application fee and collect that fee at any stage from the application process thru the issuance of Certificate of Occupancy.
- 3.100. System shall provide ability to support the following fee type calculations:
  - 3.100.1. Flat fee based on permit type
  - 3.100.2. Variable fee based on valuation constructed as follows:
    - 3.100.2.1. Processing Fee
    - 3.100.2.2. Tiered Flat fee for dollar range in valuation
    - 3.100.2.3. Additional fee for additional increments
    - 3.100.2.4. Unit fees based on number of a variety of plumbing and mechanical appliance
- 3.101. System shall provide ability to add a variety of fees that may be appropriate depending on the type of work involved.
- 3.102. The system shall provide ability to charge fees based on fixtures (e.g. cold water outlet, etc.).
- 3.103. System shall provide ability to handle fee exemptions and inter-departmental billing processes.
- 3.104. System shall provide ability to track a fee that will become due when a future activity occurs (e.g., a Certificate of Occupancy fees due before a final inspection can be scheduled before a Certificate of Occupancy can be issued).
- 3.105. System shall provide ability to recalculate, log and display all changes to fees regardless of status of permit.
- 3.106. System shall provide ability to calculate fees according to the City's business rules when permits are processed over the Internet.
- 3.107. System shall provide ability to issue a renewal charge.
- 3.108. System shall provide ability to replicate common information (e.g. contractor's name, through an entire application).
- 3.109. System shall provide ability to deduct other fees, especially filing fees, from the time and expenses owed.
- 3.110. System shall provide ability to calculate a modified fee based on previously filed applications for the overall project.
- 3.111. System shall allow multiple users - remote and distributed access, leveraging VPN technologies.
- 3.112. System shall provide ability to maintain a single integrated database that is used across functionalities and modules.
- 3.113. System shall provide ability to allow multiple users to view the same record simultaneously, without lockout.
- 3.114. System shall provide ability to allow multiple users to query information and run reports simultaneously.
- 3.115. System shall provide ability to apply locks at the record level to ensure correct updating of data, with immediate release after update.

- 3.116. System shall provide ability to send message alerts to all users via City's messaging system, which will be M.S. Lync.
- 3.117. System shall provide ability to support real time access and batch update processing of information.
- 3.118. System shall provide customizable user interfaces, including ability to customize menus and forms, by user.
- 3.119. System shall provide automatic job scheduling (i.e., batch jobs, billing, etc.) and automatically send alerts for job failures.
- 3.120. System shall support effective dating for transactions and table updates, including both future and retroactive changes.
- 3.121. System shall provide ability to prohibit record deletions and use statuses to indicate records that were created in error - tag as "soft" deletes with employee logging.
- 3.122. System shall provide ability to provide cancel/accept a system feature for any data entry screen or document creation.
- 3.123. System shall adhere to all requirements listed under the Americans with Disabilities Act (ADA) and be Section 508 compliant.
- 3.124. System shall provide ability to access and service request activity information from wireless devices, both by browser and app (iPhone/iPad/Android).
- 3.125. System shall provide ability to synchronize data with the system based on a system defined time value, to ensure that users can access virtually real-time data.
- 3.126. System shall provide the capability to identify the existence of program and/or system discrepancies and issue an alert to the system administrator.
- 3.127. System shall provide ability to limit the types of operations (e.g., read, write, delete, data dictionary modification) that can be performed by individual users on given data or program files.
- 3.128. System shall display a message if a particular data element cannot be modified because someone else is modifying it and has a record lock on it. The message shall say who has locked the data.
- 3.129. A date shall be associated with configuration changes. Historical data shall remain with the period of configuration as appropriate. For example, if an employee changes departments, the statistics for the work he/she did prior to the move shall fall under the original department.
- 3.130. System shall provide a security scheme that allows:
  - 3.130.1. Establishing a logon ID/password delivery method via a multi-step verification process (e.g., email verification with unique URL to verify/activate account).
  - 3.130.2. Providing automatic password re-issuance via email.
  - 3.130.3. Canceling of inactive accounts after a specified period of time.
- 3.131. System shall provide authorized users with the ability for application filing, permit issuance and renewals on-line with electronic plan submittals.
- 3.132. System shall provide authorized users with the ability for application filing, permit issuance and renewals on-line with electronic plan submittals.



#### **4. Land/Parcel Management/Property Management**

- 4.1. System shall be land/property-based and maintain the following hierarchy:
  - 4.1.1. Parcel,
  - 4.1.2. Property,
  - 4.1.3. Owner/applicant/occupancy,
  - 4.1.4. Project type,
  - 4.1.5. Project,
  - 4.1.6. Permit/Case/CRM Request type,
  - 4.1.7. Permit/Case/CRM Request,
  - 4.1.8. Permit/Case/CRM review activity/status,
  - 4.1.9. Inspection/Work Order type,
  - 4.1.10. Inspection/Work Order,
  - 4.1.11. Inspection/Work Order results
- 4.2. System shall provide ability to make all data related to the property/site available in an integrated and centralized fashion, e.g. data from other departments, number and type of permits, permit status, work flow, history, history of changes of use (3R-report of residential records), owner data, property type, flags-alerts, block and lot numbers, etc.
- 4.3. Ability to view a history of all updates/changes to a parcel and property (showing old value, new value, updated by, etc.).
- 4.4. System shall utilize GIS data and interactive maps to allow the selection of a single property or group of properties.
- 4.5. Ability to create and modify permits and other records directly from a map service.
- 4.6. View detailed parcel information from a map service.
- 4.7. Ability to Measure the distance from one parcel to another or a collection of selected parcels.
- 4.8. In a map service select parcels within a specified radius or drawn boundary.
- 4.9. Mark-up GIS maps easily and send modified map in pdf or image format.
- 4.10. System shall provide ability to specify floors and/or units to be worked on.
- 4.11. System shall provide ability to track projects that are not associated with a City block and lot number and provide required user-defined information (e.g., time, materials, resource allocation, project status, percent completion, notable events for progress, etc.).
- 4.12. Ability to validate that the City of McKinney address and APN exists in City's GIS database when initializing permit application.
- 4.13. System shall provide ability to route Site Plan to appropriate agency to provide applicant with parcel adjustment procedures (e.g., when parcel info does not agree with Assessor's data).
- 4.14. System shall provide ability to identify any outstanding parcel conditions noted by agencies involved.
- 4.15. Easy access to a list of all open or expired permits / permit applications for the same parcel(s) during permit initializing process.
- 4.16. Ability to support multiple (unlimited) Parcels & Addresses for each permit/license. Ability to tie multiple parcels to particular project. If the project description is changed for the project, the new description, as well as historical project description (alias description), should be visible on all parcels tied to the project (and all permits for those parcels). Historical project names should be query-able.

- 4.17. Ability to auto populate and identify geo area information (i.e. Flood, Seismic / Sprinklers /Covenants, etc.) for a permit based on address or APN.
- 4.18. Ability to list any Warnings, Locks, Holds and Notices or Restrictions for parcel during permit initializing process.
- 4.19. Restrict the issuance of permits for certain parcels based on access authority (e.g. holds are placed on certain permits and/or parcel that may require approval by Planning Manager or Building Official).
- 4.20. Ability to view historical permit data such as floor area or valuation within a certain date range issued for a particular structure.
- 4.21. Address data is verified and cross-checked against comprehensive property profiles containing historical and current information regarding all aspects of the property.
- 4.22. Property data is reviewed for any property issues that may affect permit issuance (i.e. hazards, complaints/code enforcement, tax, fire, health, etc.).
- 4.23. System shall provide ability to retrieve, display and/or format GIS information (e.g. ArcView maps, zoning maps, FEMA maps, aerial photos, topographic surveys, etc.) and link them to the project file including, but not limited to:
  - 4.23.1. Applicable zoning and General Plan regulations, environmental resources and constraints
  - 4.23.2. Topography
  - 4.23.3. Related information for adjacent properties
  - 4.23.4. View corridors and related information by geographical area such as a drainage basin or watershed
  - 4.23.5. City maintained roads, private roads, and other applicable road information
  - 4.23.6. City maintained utilities
  - 4.23.7. Public utilities
  - 4.23.8. Easements and rights-of-way
  - 4.23.9. Tentative maps, final maps and conditions
  - 4.23.10. Other zoned property within specified distance, including nearby, adjacent, and/or inside the designated perimeter
  - 4.23.11. Percentage of parcel within certain slopes
  - 4.23.12. Annual solar position
  - 4.23.13. Distance to nearby Recreation & Park facilities, and required open spaces
  - 4.23.14. Planning entitlements for subject and surrounding properties
  - 4.23.15. Historic preservation ratings and districts
- 4.24. System shall provide ability to flag City-owned properties.
  - 4.24.1. City-owned property (Y/N)
  - 4.24.2. Space leased by the City from others (Y/N)
  - 4.24.3. City-owned space leased to others (Y/N)
- 4.25. System shall provide ability to assign street addresses. Ability for user to select street names from database list through a drop down menu (and to validate that the street entered exists in the database).
- 4.26. Maximum efforts made to prevent users from multiple entries of unique addresses, and parcels. System shall provide warnings and flags to ensure accurate assignment of addresses
- 4.27. System shall automatically generate addresses based on selected block and lot and provide user the ability to override.

- 4.28. Ability to create, view, edit, delete (mark as historical) parcels, & addresses within the City's jurisdiction.
- 4.29. Ability to verify a property/address is located within City's jurisdiction.
- 4.30. Ability to validate customer address data against City of McKinney master address database.
- 4.31. For certain address fields (owner, contact, etc.), the ability to enter foreign addresses.
- 4.32. Ability to differentiate structural addresses from non-structural addresses (meters, street light pedestal, gates, etc.).
- 4.33. Ability to assign a location to any permit/license based on a variety of methods (GIS coordinates, address, parcel or combination of those).
- 4.34. Ability to have multiple addresses and multiple buildings on a parcel.
- 4.35. Ability to link the permit/license to a property and retain connection after property is changed through parcel splits, parcel combines, etc.
- 4.36. Ability to show all permit/license history on a parcel.
- 4.37. Ability to show history (current, temporary, retired) of all addresses on a parcel (history with comments explaining reason for change, etc.).
- 4.38. Ability to configure the automatic generation and assignment of addresses based on selected block and lot and provide the ability to override under certain circumstances (e.g. supervisor override).
- 4.39. Ability to keep track of all historical processing (lot splits, combines) that may have occurred to one parcel and not lose the linkage to other existing data throughout the system.
- 4.40. System shall provide block and lot information.
- 4.41. System shall provide zoning information.
- 4.42. Ability to capture multiple land use / zoning codes for one parcel.
- 4.43. Ability to view zone history for a parcel (including ordinance numbers and dates).
- 4.44. System shall provide active and historic interim controls such as current and historic zones, districts, etc. and tie related documents to parcel history.
- 4.45. System shall provide ability to track expiration dates of entitlements.
- 4.46. System shall provide existing property restrictions (e.g. easements, deed restrictions, etc.).
- 4.47. System has the ability to provide a list of all of the permits, including business licenses, land use actions, or Certificates of Occupancy at a specific address including the status for each of those permits.
- 4.48. System shall provide ability for user to search on a range of addresses to identify current projects in an area and display information summaries of those projects (e.g., status of projects or applications).
- 4.49. System shall capture impervious areas (e.g. parking lots) in GIS.
- 4.50. System shall provide ability to capture conditions related to a subdivision applying to several blocks and lots that may not have official tax lot numbers for several months. These conditions can be recorded and not be missed as development takes place on the new lots.
- 4.51. System shall provide ability to retain the baseline General Plan, and identify all modifications to the General Plan along with associated information (e.g., date modification made, staff member making modification, related case numbers, related hearing dates, etc.).
- 4.52. System shall provide ability to make the electronic General Plan (map) available to City staff, staff from other City Departments, outside agencies, and the public.

- 4.53. System shall provide ability to track, validate and record Site Plan requirements, when applicable.
- 4.54. System shall provide ability to capture baseline information related to structures, units and legal uses including, but not limited to, the following:
  - 4.54.1. Approved uses and occupancies (e.g., office, retail, industrial, housing, hotel, etc.)
  - 4.54.2. Housing types
  - 4.54.3. Number of bedrooms
  - 4.54.4. Commercial uses
  - 4.54.5. Parking
  - 4.54.6. Car sharing
  - 4.54.7. Freight loading
  - 4.54.8. Affordability
  - 4.54.9. Design information
  - 4.54.10. Links to electronic copies of approved plans
  - 4.54.11. Other restrictions and conditions
- 4.55. System shall provide ability to track changes to the structure/unit/legal use baseline information (e.g., addition/loss of space for a specific use, additions/loss of units).
- 4.56. System shall provide ability to associate changes in the structure/unit/legal use baseline information with a specific block and lot and with other geographical areas (e.g., downtown plan, area plan, neighborhood plan, districts, etc.).
- 4.57. Post Occupancy, system shall provide ability to flag building permit and entitlement applications that impact Below Market Rate (BMR) Housing units.
- 4.58. System shall provide ability to flag changes to building permit and entitlement applications that impact BMR units.
- 4.59. System shall provide ability to automatically identify a condition of approval on building permit applications that requires the property owner to report actual use of the structure after it is occupied.
- 4.60. Ability to identify occupancy groups on a permit. Most buildings have more than one occupancy group associated.
- 4.61. Ability to view the occupancy group and code edition permitted under history at the parcel/address level (including square footage).
- 4.62. Ability to capture location and description of occupancy.
- 4.63. Ability to define occupancy subgroups.
- 4.64. Ability to capture occupant loads in certain occupancies such as group A occupancies. Must be able capture by each space, not just the total. Occupant loads should be able to be captured on a room-by-room basis.
- 4.65. System shall provide ability to track whether project is in Urbanized Area (UA), City or Extraterritorial Jurisdiction (ETJ).
- 4.66. System shall provide ability to track industrial, commercial, and multi-family facilities.
- 4.67. System shall provide ability to track whether FEMA floodplain exists on the property.
- 4.68. System shall provide ability to track fully developed floodplain and all flood studies.
- 4.69. System shall provide ability to track projects that involve fill.
- 4.70. System shall provide ability to track floodplain revision fees.
- 4.71. System shall provide ability to track flood plain detention facilities.

- 4.72. System shall provide ability to track environmental spills.
- 4.73. System shall provide ability to track Underground Storage Tanks.
- 4.74. System shall provide ability to track chemical storage.
- 4.75. System shall provide ability to track sites with Environmental Protection Agency (EPA) and Texas Commission on Environmental Quality (TCEQ) records.
- 4.76. System shall provide ability to track abandoned wells.
- 4.77. System shall provide ability to track sites identified with other environmental concerns not listed.
- 4.78. System shall provide structure information:
  - 4.78.1. Unique building identifier
  - 4.78.2. Year built
  - 4.78.3. Construction type and multiple construction types
  - 4.78.4. Building footprint area
  - 4.78.5. Size of improvement area
  - 4.78.6. Gross floor area (broken down into first, second, third floor, etc.)
  - 4.78.7. Number of stories
  - 4.78.8. Number of sub grade levels (e.g., basement)
  - 4.78.9. Number of bedrooms
  - 4.78.10. Number of affordable housing units
  - 4.78.11. Square footage
  - 4.78.12. Building height
  - 4.78.13. Proposed setbacks
  - 4.78.14. Accessibility information including costs and other comments (e.g., parking space, main exterior doors, interior doors and toilet facilities, TDLR #, etc.)
  - 4.78.15. Sensitive areas
  - 4.78.16. Housing rehabilitation
  - 4.78.17. HVAC information, including floor area by floor level
  - 4.78.18. Smoke control (Y/N)
  - 4.78.19. Emergency generator (Y/N)
  - 4.78.20. Fire sprinklers required (Y/N)
  - 4.78.21. Fire alarm required (Y/N)
  - 4.78.22. Hazardous materials (Y/N)
- 4.79. System shall provide ability to automatically associate a permit with a block and lot and display any user-defined associated owner information.
- 4.80. System shall provide ability to associate a tenant or occupant with a building and display any associated user-defined tenant/occupant information.
- 4.81. System has the ability to provide a list of all of the permits, including business licenses, land use actions, or Certificates of Occupancy at a specific address including the status for each of those permits.
- 4.82. System shall provide ability to display sewer lines by block and lot.
- 4.83. System shall provide ability to store pre-fire plans for specific properties.
- 4.84. System shall provide ability to record hazardous materials information items associated with a particular occupancy including, but not limited to:
  - 4.84.1. Material
  - 4.84.2. Common Name
  - 4.84.3. Container

- 4.84.4. Location
- 4.84.5. MSDS (Material Safety Data Sheets)
- 4.84.6. MSDS Sheet location
- 4.84.7. Stored Quantity
- 4.84.8. Total Quantity
- 4.84.9. Annual Waste Total
- 4.84.10. Hazardous Classification
- 4.84.11. Comments
- 4.85. System shall provide ability to aggregate the number of hazardous materials in a building by listing the hazardous materials within each occupancy in the building.
- 4.86. System shall provide ability to bring up all permits and conditions of approval relating to the same site (e.g., a site permit and all permits related to the site).
- 4.87. Ability to automatically default in fees, quantities, workflow items, condition of approval, inspections, flags, etc. based on geo code and geo type.
- 4.88. Ability to identify if fees have already been paid on a parcel - some fees are one time fees per parcel.
- 4.89. System shall provide ability to calculate, assess and track payment of impact fees including, but not limited to:
  - 4.89.1. Transit Impact Development Fee (TIDF)
  - 4.89.2. School District Fees
  - 4.89.3. Affordable Housing - Job Linkage Housing Program
  - 4.89.4. Housing
  - 4.89.5. Funds
  - 4.89.6. Fees – Roadway and utility Impact fees, Median landscape fees, Parkland dedication fees, NRCS Lake Contribution fees
- 4.90. System shall provide ability to add and/or remove impact fee types.
- 4.91. Ability to default in fees, conditions of approval, flags, etc. based on geographic data (park tax districts, redevelopment areas, sprinkler zoning, etc.) returned by a map service.

## **5. Customer/Owner/Applicant/Occupancy Management**

- 5.1. System shall provide ability to capture related items of contact information including, but not limited to:
  - 5.1.1. Applicant information (name, address, phone, etc.)
  - 5.1.2. Property owner Information (name, address, phone, etc.)
  - 5.1.3. Contractor information (name, address, phone, etc.)
  - 5.1.4. Project management information (name, address, phone, etc.)
  - 5.1.5. Architect information (name, address, phone, etc.)
  - 5.1.6. Engineer(s) information (name, address, phone, etc.)
  - 5.1.7. Developer information (name, address, phone, etc.)
  - 5.1.8. Contact person (name, address, phone, etc.)
- 5.2. Ability to view a history of all updates/changes to owner, applicant, and occupancy (showing old value, new value, updated by, etc.).
- 5.3. Configurable Citizen online access to permit/license information (showing certain data fields, hiding others by permit/license type).
- 5.4. Public online search for permits/licenses and inspections based on permit/license type, permit/license status, permit/business name,

- address, parcel, owner, permit/license number, phone number, etc. from desktop browser or mobile device.
- 5.5. Ability to add a flag/hold at the customer level.
  - 5.6. System shall provide ability to validate customer data against a reliable set of base data.
  - 5.7. System shall track history of name change and owner change on CO's.
  - 5.8. Contractor data is verified including but not limited to State licensure, City of McKinney business licensure or contractor registration.
  - 5.9. Ability to capture multiple owners on a parcel.
  - 5.10. Ability to associate a tenancy or user with a building.
  - 5.11. Provide ability to track design professionals, even those not required to obtain a business license.
  - 5.12. System shall provide ability to track Industrial Manufacturers.
  - 5.13. Allow a contractor to "register" for a permit by going to a web page, entering in the state license and type, the City of McKinney business license and type, the discipline (example: mechanical, plumbing, etc.), and the City of McKinney permit number. If the information is valid, the contractor will be "registered" for that permit and discipline. For specified permit types, require this registration before allowing inspections of that discipline to be scheduled on the permit.
  - 5.14. System shall provide ability to associate items of general information with a particular occupancy including, but not limited to:
    - 5.14.1. Emergency Contacts (three)
    - 5.14.2. Occupancy Code
    - 5.14.3. Code Year
    - 5.14.4. Property type
    - 5.14.5. Permit Number
    - 5.14.6. Plan Number
    - 5.14.7. Census Tract
    - 5.14.8. Date of initial inspection
    - 5.14.9. Date of next anticipated Inspection
    - 5.14.10. Actual re-inspection dates
    - 5.14.11. Number of months between Inspections
    - 5.14.12. Type of Inspection required
    - 5.14.13. Structural Information
    - 5.14.14. Floor type
    - 5.14.15. Interior Partitions
    - 5.14.16. Exterior Wall type
    - 5.14.17. Ceiling type
    - 5.14.18. Roof type
    - 5.14.19. Construction Type
    - 5.14.20. Heating type
    - 5.14.21. Fuel type
    - 5.14.22. Total square footage
    - 5.14.23. Height
    - 5.14.24. Number of Floors
    - 5.14.25. Basement
    - 5.14.26. System shall provide ability to associate items of fire information with a particular occupancy including, but not limited to:
      - 5.14.27. Fire Demand Zone (geographical area code)
      - 5.14.28. Fire Station responsible for Inspection
      - 5.14.29. Sprinkler System information

- 5.14.30. Type
- 5.14.31. Shutoff location
- 5.14.32. Area covered
- 5.14.33. Other Fire Protection information
- 5.14.34. Alarm panel location
- 5.14.35. Gas/Fuel shutoff location
- 5.14.36. Lock box location
- 5.14.37. Stand pipe location and comments
- 5.14.38. Power shutoff location
- 5.14.39. Water shutoff location
- 5.14.40. Rated Fire Walls
- 5.14.41. Comments
- 5.14.42. Electrical
- 5.15. System shall provide ability to include "power sources" information, e.g. voltage, phase, amps, AFC, O/U, # disc, # meters, load, location, and date based on City parameters
- 5.16. System shall provide the ability to track condominium owners of the same building which own different lots of record as part of the state statutory condominium subdivision law.
- 5.17. Ability to automatically place a hold at the professional level when the professional's license status becomes invalid, if configured that way for this permit/license type.
- 5.18. Ability to place a hold on a professional, to prevent that professional from being linked to a building permit and/or scheduling inspections.
- 5.19. Ability to create a customer entity, which may have multiple licenses.
- 5.20. Ability to create an owner entity with multiple owner names (i.e. General Partnership with multiple people listed as owners) which can have multiple businesses.
- 5.21. Ability to create a person entity, linked to one or more roles, and linked to one or more licenses/permits. Changes to a particular person's contact info would propagate to licenses/permits.

## **6. Permit/License Management**

- 6.1. System shall provide for Electronic Plan Submittal.
- 6.2. Ability to accept electronic and over-the-counter plan submittal.
- 6.3. Ability to enter a permit/license accept date (distinct from permit entry date).
- 6.4. Ability to accept permit applications for the various trades, review for accuracy and completeness with ability to capture common errors/defects and report on the number and type of rejected vs. accepted plans.
- 6.5. System shall provide ability to record and make changes to pre-development information, including, but not limited to:
  - 6.5.1. Related items (e.g., site map, site plan, variance, zoning adjustment, block and lot map, tract map, abandonments, miscellaneous projects, etc.)
  - 6.5.2. Identification of existing environmental documents
  - 6.5.3. Staff report including all attachments (e.g., plans, photos, correspondence, etc.), conditions for approval via hyperlink.
  - 6.5.4. Environmental determination
  - 6.5.5. Statement of preliminary determination of development regulations



- 6.5.6. Date of recording of survey, plot, conditions and restrictions sent to City
- 6.5.7. Existing property restrictions (e.g., easements, deed restrictions, etc.)
- 6.5.8. Exceptions linked to group block and lot within areas of the City (e.g., redevelopment areas, parking districts, etc.)
- 6.5.9. Resolution number
- 6.5.10. System shall provide ability to capture related items of permit application information including, but not limited to:
  - 6.5.11. Application submission date
  - 6.5.12. Date planner assigned and name of planner assigned
  - 6.5.13. Name of supervisor assigned
  - 6.5.14. Date application determined complete for processing
  - 6.5.15. Routing of application (internal and external)
  - 6.5.16. Target review date (internal)
  - 6.5.17. Type of application (new building, alteration, etc.)
  - 6.5.18. Type of use (residential, commercial, etc.)
  - 6.5.19. Type of permit
  - 6.5.20. Date plan check submitted
  - 6.5.21. Accelerated plan check information
  - 6.5.22. Related permits issued
  - 6.5.23. Related permit applications
  - 6.5.24. Notices of violation (issued, abated, outstanding)
  - 6.5.25. Correction notices (issued, abated, outstanding)
  - 6.5.26. Plan check ready date
  - 6.5.27. Date plan check picked up/comments sent
  - 6.5.28. Date plan check approved, date plan check approved
  - 6.5.29. Contractor ID
  - 6.5.30. Contractor state license
  - 6.5.31. Contractor city business license
  - 6.5.32. Valuation
  - 6.5.33. Permit issuance date
  - 6.5.34. Permit expiration date
  - 6.5.35. Date of Board or Commission Hearing, including continued hearing dates
  - 6.5.36. Date of Board or Commission action
  - 6.5.37. Date of administrative action
  - 6.5.38. Date of hearing
  - 6.5.39. Date of action
  - 6.5.40. Date of Board of Appeals' hearing
  - 6.5.41. Date of Zoning Administrator action
  - 6.5.42. Date of Board of Appeals' action
  - 6.5.43. Date of NSR recordation
  - 6.5.44. Dates of environmental review milestones, preliminary drafts, planner assignment, etc.
  - 6.5.45. Dates of permit milestones
  - 6.5.46. Date of pre-application meeting(s) and attendees
  - 6.5.47. Date of project review meeting(s) and attendees
- 6.6. System shall provide ability to track the life cycle of a permit – from application through completion.
- 6.7. System shall provide ability to record whether City staff has been provided with required permits/approvals from outside agencies.

- Permits/approvals from the appropriate agencies would need to be obtained by the applicant.
- 6.8. System shall have flexible configuration (by permit/license type) for sending an automatic email to internal staff (plan checker, inspector, etc.) and/or external parties (contractor, developer, owner, builder, applicant, contact, etc.) upon update of a workflow event (inspection, plan review, permit/license status change, condition of approval, flag/hold, etc.).
  - 6.9. Ability to configure default plan review checklist items by permit type, but also to manually add and/or remove items from this list on an individual permit or inspection if desired. For each checklist item, the ability to select an appropriate correction code from a dropdown list.
  - 6.10. System shall provide ability to accurately track the time used by City staff to process permits and cases, separate from time used by the applicant and staff activity within the review process (i.e., track "hold" times when it is outside the City's control).
  - 6.11. Ability to track the plan review process by permit number including multiple phased reviews and revisions.
  - 6.12. Ability to Utilize sub permit type to define multiple estimated completion dates for the same type of permit. Such as a simple remodel vs. a complicated or involved remodel, expedited projects, etc.
  - 6.13. An employee and work group "To-do" sortable list to include an "amount of work" such as square footage, stories, etc. to assist in scheduling work.
  - 6.14. Ability to set up a permit/license that never expires.
  - 6.15. Ability to set up a non-renewable, auto expiring permit/license.
  - 6.16. Ability to set up a permit/license to automatically expire x months, y days, and z years after the Issue date or accept date, as configured.
  - 6.17. Ability to set up a permit/license to automatically expire x days after last inspection has been signed off.
  - 6.18. Ability to set up a permit/license to automatically expire x days after a particular activity has been signed off.
  - 6.19. Ability to set up a permit/license to automatically expire at the end of the quarter, month, or year.
  - 6.20. Ability to set up a permit/license to automatically expire on a specific date of the year (July 4th for fireworks).
  - 6.21. Ability to configure an event, or conjunction of events, (passed inspection, signed off condition of approval, fee payment, etc.) to trigger an automatic renewal.
  - 6.22. Specified events (adding fees, mailing renewal notices, scheduling an inspection, etc.) can be set up to automatically occur a specified number of days before or after the permit/license expires.
  - 6.23. Ability to manually adjust the initial expiration date, while using default setup for new expiration date upon the first renewal. (Example, a customer applies late, so initial expiration date is earlier than the default).
  - 6.24. Internal staff can manually renew a permit/license.
  - 6.25. Ability to associate professionals with the permit/license.
  - 6.26. Ability to validate the business license and state license of a professional before adding it to a permit.
  - 6.27. System shall provide flexible method for establishing permit identification (numbering), which efficiently captures the type of permit.

- 6.28. Ability to tie a permit/license as a "child" of another permit/license to build a permit/license hierarchy and easy access to a user-friendly view of this hierarchy.
- 6.29. Have a work center where internal staff can view all of the workflow items (plan reviews) assigned to them (or their workgroup) along with target dates for completion.
- 6.30. System shall provide ability to record the case planner, supervisor, case manager and date assigned to each.
- 6.31. System shall provide ability to change case planner, supervisor, and/or case manager while retaining history of assignments.
- 6.32. System shall provide ability to report workload assignments and progress to management.
- 6.33. System shall provide ability to capture review unit(s), review purpose, date routed and target date due back.
- 6.34. System shall provide ability to conduct and track analysis for all case types.
- 6.35. System shall provide ability to track working time (i.e., hours worked) and elapsed time (i.e., calendar days) associated with each step of the case analysis process and for completion of the entire case.
- 6.36. System shall provide ability to use baseline data on working time and elapsed time for each case type to forecast resources required for each step of the case analysis process and for completion of the entire case.
- 6.37. System shall provide ability to use baseline data on working time and elapsed time for to set standard timeframes for each step in the case analysis process for each case type.
- 6.38. System shall provide ability to increase accuracy of resource and timeframe forecasts by adding data collected for each completed case to the baseline data.
- 6.39. System shall provide prompts and notices prior to due dates for each step in the case analysis process.
- 6.40. System shall provide ability to capture case analysis project management and workflow information including, but not limited to:
- 6.41. Departmental units conducting analysis and estimated completion dates
- 6.42. Status of Departmental unit analysis (e.g., outstanding, completed)
- 6.43. Date of Departmental unit completion of analysis, along with any comments and issues
- 6.44. System shall provide ability to record overall results of City's case analysis (e.g., approved, denied, etc.), date decision was made and reasoning behind decision.
- 6.45. System shall provide ability to allow insertion of pre-defined case analysis comments (standard conditions) as well as ad hoc comments.
- 6.46. System shall provide ability to track a variety of hearing types.
- 6.47. System shall provide ability to flag any cases where required fees or other incomplete requirements have not been addressed prior to scheduling a hearing.
- 6.48. System shall provide ability to facilitate the scheduling of hearings by providing a list of available hearings for a specific date range, including but not limited to:
  - 6.48.1. Dates available
  - 6.48.2. Time
  - 6.48.3. Type of hearing

- 6.48.4. Number of items allowed on agenda
- 6.48.5. Items already on agenda
- 6.49. System shall provide ability to track hearings requested and those scheduled.
- 6.50. System shall provide ability to maintain record of hearing dates, type, brief subject of hearing, description and participants.
- 6.51. System shall provide ability to record hearing dispositions and decisions such as continuance, referral, remanded, approval, and denied.
- 6.52. System shall provide ability to record revised type, description and complexity of project
- 6.53. Ability to view a history of all updates/changes to a permit/license, parcel, inspection, workflow item, etc. (showing old value, new value, updated by, etc.).
- 6.54. Ability to view a history of all updates/changes to a permit/license, workflow item, etc. (showing old value, new value, updated by, etc.).
- 6.55. Ability to automatically create a workflow item, inspection, condition of approval, etc. when a particular permit/license type (or group of types) changes to a particular status.
- 6.56. Ability to automatically change the status of a permit/license a certain number of days after the last activity or inspection has occurred.
- 6.57. Ability to combine bills for multiple permits/licenses for the same customer into one bill upon renewal.
- 6.58. Ability to have one master permit/license with multiple quantities used to calculate fees and schedule specific inspections.
- 6.59. Upon sign off of a condition of approval for a particular permit type, automatically trigger creation of a new permit of a specified type, copying over specified fields from the original permit.
- 6.60. System shall provide ability to provide accurate and reliable permits and permit-related data.
- 6.61. System shall provide ability to support permits or administrative actions that do not have associated fees.
- 6.62. System shall provide ability to record a final approval for a permit to be issued with appropriate security features in order to prevent any modifications to the permit.
- 6.63. System shall provide ability to record scanned images of signatures and “sign” (apply authorized signatures to) permits electronically.
- 6.64. System shall provide ability to support rapid over the counter permit issuance.
- 6.65. System shall provide ability to combine permit types and manage associated fees (e.g., allowing applicants to receive one physical permit for any combination of building, mechanical, electrical and plumbing permits).
- 6.66. System shall provide ability to generate a Certificate of Occupancy (CO) and record the following related information:
  - 6.66.1. CO Number
  - 6.66.2. Date Issued
  - 6.66.3. Code Year
  - 6.66.4. Permit Number
  - 6.66.5. Project Name
  - 6.66.6. Building or business Address
  - 6.66.7. Occupancy Type
  - 6.66.8. Construction Type

- 6.66.9. Building Owner (name, address, phone)
- 6.66.10. Approval spaces for signatures
- 6.66.11. Comments
- 6.66.12. Occupant Load
- 6.67. System shall provide ability to generate a Temporary Certificate of Occupancy (TCO) and eliminate that TCO when a CO is issued. System shall allow staff to log the conditions of the TCO and an expiration date if applicable.
- 6.68. System shall provide ability to route a CO to appropriate departments or individuals for their approval. System shall provide a way for each department to log each CO inspection's date and who participated, and whether the project passed or failed, and if the project failed, what was the reason.
- 6.69. System shall provide ability to associate the final approvals for each approving department with a scanned image of the signature that would print on the official CO document.
- 6.70. System shall provide appropriate security features so that once all parties approve the CO, it is "locked."
- 6.71. System shall provide ability to provide a status for a CO (e.g., in routing, issued, revoked, superseded, etc.).
- 6.72. System shall provide ability to easily display other COs, that may have been issued for the same building or group of buildings.
- 6.73. System shall provide ability to cross-reference the CO with the associated block and lot and any subsequent changes to that block and lot number so that the CO can be located by searching on either block and lot number.
- 6.74. System shall provide ability to send reminders to departments, supervisors/directors or City individuals who have not approved or reviewed COs after a user-defined period of time.
- 6.75. Ability to batch sign-off conditions of approval, activities, flags, etc. by permit type, permit number range, permit name, etc.
- 6.76. For paper submittals, system shall provide ability to indicate the number of black line drawings submitted.
- 6.77. System shall provide ability to conduct intake over the counter without routing for further review.
- 6.78. System shall provide ability to route applications requiring Site Plan to appropriate agency for electronic approvals (e.g., stamp).
- 6.79. Ability to duplicate part or all of the data from one permit/license record to another.
- 6.80. Ability to add a hyperlink for an external website, with an embedded identifier (apn, etc.) in the url parameters, during the permit initialization process.
- 6.81. Ability to review permit information regardless of status.
- 6.82. Restrict resubmittal of plans until all comments are submitted to system and automated response is sent to applicant.
- 6.83. System shall provide ability to track issuance of a revised final determination.
- 6.84. System shall provide ability to track issuance of site permits, including permits issued during multiple project phases.
- 6.85. System shall provide ability to record changes to project description during application review process, including maintaining historical records on initial submittal.

- 6.86. Systems shall provide ability to determine the status of a permit during various phases of the permit process (e.g., application phase, review phase, etc.).
- 6.87. System shall provide ability to assign completeness review due date, and include this date on inquiries and reports (e.g., standard completeness review deadline is currently 30 days from application date).
- 6.88. System shall provide ability to allow the standard number of days for completeness reviews to be modified by an administrator on a case-by-case basis.
- 6.89. System shall provide ability to capture completeness review project management and workflow information including, but not limited to: i. Departmental units conducting completeness reviews and estimated completion dates ii. Status of departmental unit completeness reviews (e.g., outstanding, completed) iii. Date of departmental unit completion of completeness review, along with any comments and issues
- 6.90. System shall provide ability to establish minimum completeness standards for each case type, and generate warnings to staff when applications do not meet minimum standards.
- 6.91. Plans (i.e. CAD file) shall be screened against current International Code (ICC) with results returned.
- 6.92. System shall provide ability to allow insertion of pre-defined completeness review comments as well as ad hoc comments.
- 6.93. System shall provide ability to distinguish between completeness review comments officially provided to the public and in-house notes.
- 6.94. System shall provide ability to record overall results of City's completeness review (i.e., complete or incomplete), date decision was made and reasoning behind decision.
- 6.95. Ability to monitor individual and department plan review time statistics against accepted service targets for the permit type and review type (first review, 2nd review, mylar review, etc.).
- 6.96. The ability to track the activities of receiving, routing and review.
- 6.97. The ability to customize flags in the system in terms of when they will appear. (Flags used for a portion of the permit only, such as the flag will only show up until the permit is issued).
- 6.98. Automatic sign off flag by completing activity, condition, or inspection, etc.
- 6.99. The ability to set conditions of approval that are required to be signed off before a permit/license can be issued, an inspection could be scheduled or in some instances any other changes are made at all on the permit/license.
- 6.100. The ability to automate the sign off of conditions of approval on associated (child, sibling, etc.) permits when the criteria the condition is based on is a completion of a permit. (Example: Shell/TI Condition of Approval).
- 6.101. System shall provide a Traffic Impact Analysis (TIA) project tracking module that tracks relevant data including, but not limited to:
  - 6.101.1. TIA submittal date
  - 6.101.2. Review comments
  - 6.101.3. Project ID number
  - 6.101.4. Location of project
  - 6.101.5. Associated planning and/or engineering projects
  - 6.101.6. Approval status

- 6.102. System shall provide ability to track Traffic Impact Analyses (TIA)s with associated properties through land subdivision, ownership changes, and multiple related development projects.
- 6.103. System shall provide ability to track required improvements, such as road and intersection construction through land subdivision, ownership changes, and multiple development projects.
- 6.104. Tracking of Traffic Improvement Analyses (TIAs) and required improvements, such as water and sewer (e.g. Trinity Falls), shall provide ability to track over time (example: improvements required 36 months after date), over multiple phases (improvements required with phase four), and over given number of units (improvements required upon 400th building permit).
- 6.105. In addition to tracking Traffic Improvement Analysis (TIA) information over time, the system shall provide notice of deadlines and/or other timing mechanisms.
- 6.106. Ability to make certain fields mandatory (if configured that way for a particular permit/license type).
- 6.107. Track main building design and code elements such as Code Requirements, Type of Constructions, Fire Systems, etc.
- 6.108. Ability to generate a custom plan review checklist based on the items in item main building design and code elements as well as permit type and the ability to modify that checklist later if the criteria in main building design and code elements changes.
- 6.109. On-line payment triggers issuing of a permit (if configured that way for the permit/license type).
- 6.110. Ability to create templates for frequently generated permits either by permit or even by customer (i.e. high volume).
- 6.111. Ability to track permits at the project level, relating to development agreements including the generation of a permit activity summary report and automated notifications to external and internal customers at set parameters before level is reached and when level is reached and any other data that is relevant to development agreements.
- 6.112. Ability to tie a permit/license to a permit to a parcel not located in City of McKinney (inter-local agreement, courtesy reviews, etc.).
- 6.113. Provide for logging dates sent, reviewed, due, rejected or approved for multiple reviewers, as well as a remarks area for each reviewer.
- 6.114. Ability for a plan reviewer in each Department to select a specific plan review comment from a list of standard comments.
- 6.115. Ability to define and add standard conditions as well as free form condition information.
- 6.116. Ability to easily reassign multiple activities from one user/group to another user/group.
- 6.117. Ability to draw/write/annotate directly on the electronic plans.
- 6.118. Ability to track Over-the-Counter Review Process (with or without plans) and the time examination period per reviewing agency/station.
- 6.119. Ability to submit plan, route to reviewing agencies for code requirements, and track the relationship between permit types for a project lifecycle that may involve multiple stages such as site permits, addenda, revisions, etc.
- 6.120. Performance statistics are tracked for adherence to pre-determined service level objectives based on the application criteria determined by the City.

- 6.121. Applications are tracked based on pre-determined criteria to provide customers the ability to easily determine review status and application disposition.
- 6.122. Permit data is stored including but not limited to permit expirations, renewals, project holds, etc.
- 6.123. System shall provide ability to either tie engineering plan review to a concurrent planning case or to have a standalone process.
- 6.124. System shall provide ability to record the case engineer, supervisor and case manager and date assigned to each.
- 6.125. System shall provide ability to change case engineer, supervisor and/or case manager while retaining history of assignments.
- 6.126. System shall provide ability to report workload assignments and progress to management.
- 6.127. System shall provide ability to capture review units, review purpose, date routed and target date due back.
- 6.128. System shall provide a project tracking module that tracks the relevant data and steps in the process, including, but not limited to:
  - 6.128.1. Submittal dates for the initial submittal as well as the subsequent revisions
  - 6.128.2. Staff review comments and markups
  - 6.128.3. Correspondence between applicant and staff
  - 6.128.4. Issuance of approval and permits necessary for approval including, but not limited to TxDOT permits, grading and erosion control, environmental permits, tree permits, screening and buffering plan approval, site plan approval, civil plan approval, record plat or minor plat approval
- 6.129. System shall provide a project-tracking module for TxDOT permitting that tracks the process of application, reviews, comments, revisions and approval of TxDOT permits.
- 6.130. System shall provide ability to approve, deny and track grading permit and erosion control permit.
- 6.131. System shall provide ability to track tree surveys.
- 6.132. System shall provide ability to track tree preservation affidavit.
- 6.133. System shall provide ability to approve, deny and track tree preservation plan.
- 6.134. System shall provide ability to approve, deny and track tree permits.
- 6.135. System shall provide ability to track tree mitigation.
- 6.136. System shall provide ability to track tree preservation letters of assurance.
- 6.137. System shall provide ability to track the review activity and comments / correction checklist made by staff, including correspondence or communication materials sent to or shared with the applicant.
- 6.138. System shall provide ability to flag permits based on user-defined parameters.
- 6.139. System shall provide ability to place holds, post notices or otherwise stop a permit from being issued, until the applicant complies with specific condition(s) of any agency.
- 6.140. System shall provide ability to place holds, post notices or otherwise stop a permit from being issued, until the applicant complies with specific condition(s) of any agency.
- 6.141. System shall provide flexible method for establishing permit identification (numbering) which efficiently captures the type of permit.



- 6.142. Systems shall provide ability to determine the status of a permit during various phases of the permit process (e.g., application phase, review phase, etc.).
- 6.143. System shall provide ability to integrate Electrical, Plumbing, and Mechanical with the overall permit approval process.
- 6.144. System shall provide ability to refer to the City any plan revisions to exterior building materials or envelope.
- 6.145. Ability to expire permits/licenses if no action is taken prior to the expiration date of the application and send out letters to notify applicants of the expired status.
- 6.146. Tight integration between Business Licensing and DSC permitting (owner with a current and valid city business license can be a professional on a permit - example: plumbing permit owner is a plumbing subcontractor on a Building permit).
- 6.147. Before linking a professional to a Building permit, ensure that the professional has a valid business license.
- 6.148. Provide a way to indicate that outside activities have been completed (Condition of Approval?).
- 6.149. Ability to capture the NAICS code for a particular license.
- 6.150. Ability to key in a NAICS code on a business and have the appropriate license type default in.
- 6.151. Ability to have a free form text field at the license level marked as confidential (only viewable to select staff).
- 6.152. Ability to monitor renewal events (how many licenses ready to be issued, etc.).
- 6.153. Ability to calculate permit/license fees based on a current fee schedule.
- 6.154. Ability to automatically default in fees, quantities, workflow items, conditions of approval, inspections, etc based on permit/license type and sub-types (to help minimize the number of distinct permit types required).
- 6.155. An outstanding fee balance automatically puts a hold on a permit/license, if configured that way.
- 6.156. Ability to search by receipt number.
- 6.157. Ability for multiple permits/licenses to be processed at one time, i.e., one payment could be paying for several types of permits/licenses.
- 6.158. Ability to take an overpayment from one permit/license and apply the overage to a separate permit/license for the same customer, or hold it for the next permit/license.
- 6.159. Ability to Default in fees for a particular permit/license type).
- 6.160. Ability to automatically cancel permit/license if a particular fee has not been paid within a certain time frame.
- 6.161. Ability to predefine effective dates for permit/license fee changes. (i.e. 9/1/2013).
- 6.162. Ability to tie a payment to a particular fee line item, for a particular time period (same fee code is used for each time period on renewable permit/license).
- 6.163. System shall provide ability to identify fees and costs associated with the completeness review, including time above initial fee, revision review time, and time spent by other City agencies, such as the City Attorney's Office.
- 6.164. System shall provide ability to subtract the application fee from the overall permit fee (based on time and material charges) and collect the balance when the permit is picked up.

- 6.165. System shall provide ability to support the following types of fee adjustments after the permit is issued:
  - 6.165.1. Refunds (including refunds of transactions completed over the Internet
  - 6.165.2. Adjustments
  - 6.165.3. Revision fees
- 6.166. System shall provide ability to hold issuance of permit or Certificate of Occupancy until obligations are fulfilled.
- 6.167. Ability to track plan review deposit balances / bonds / insurance information.
- 6.168. Ability to link multiple permits to one bond.
- 6.169. Ability to link multiple bonds to one permit.

## **7. Inspection & Code Enforcement Management**

- 7.1. Ability to configure default inspection checklist items by inspection/permit type, but also to manually add and/or remove items from this list on an individual permit or inspection if desired. For each checklist item, the ability to select an appropriate correction code from a dropdown list.
- 7.2. Have a work center where internal staff can view all of the workflow items (inspections) assigned to them (or their workgroup) along with target dates for completion.
- 7.3. Ability to view a history of all updates/changes to an inspection, workflow item, etc. (showing old value, new value, updated by, etc.).
- 7.4. Ability for internal staff to update workflow items, inspections, etc. from a mobile device.
- 7.5. User friendly, simple, configurable forms for use in office and in the field (easy navigation and links).
- 7.6. Ability to default inspection upon permit/license creation based on permit type and subtype.
- 7.7. System shall provide ability to track Dry Weather Field Screening (outfall inspection and sampling) program.
- 7.8. Code enforcement cases are tracked, managed and processed including, but not limited to generation of notices of violations of Building, Electrical, Housing, Plumbing and other adopted codes.
- 7.9. Enforcement actions are tracked, managed and processed including but not limited to rescissions, inspections, corrections, and appeals, and application of any necessary enforcement actions such as liens, holds on permits, Stop Work Orders, etc.
- 7.10. Complaint/Code Enforcement data is provided to other City Departments involved in the process.
- 7.11. System shall track inspections by type, inspector, scheduled date, project, and completed date.
- 7.12. Ability to have a completed condition of approval automatically schedule an inspection or inspection group.
- 7.13. Ability to have a completed inspection automatically signoff a condition of approval.
- 7.14. Automate inspection assignments based on inspector availability (accounting for vacation, schedule, etc.), expertise (discipline), and inspector area.
- 7.15. Ability to assign a default inspector to a project and/or permit. Inspections on that project should be assigned to that inspector, if the inspector's schedule shows that he/she is available.

- 7.16. Ability to quickly re-assign a group of inspections to another Inspector.
- 7.17. Have standard notes unique to each inspection type.
- 7.18. Ability to batch schedule inspections from a single screen for all inspection requests.
- 7.19. Able to automatically insert a re- inspection fee based on the failed status of an inspection.
- 7.20. Ensure that appropriate previous inspections are approved, before accepting the next inspection type, if configured that way.
- 7.21. Ability to view a centralized Work Calendar for all inspectors.
- 7.22. Rerouting inspections from the Work Calendar by dragging and dropping to another Inspector's calendar.
- 7.23. View Microsoft Outlook calendar appointments on the Work Calendar.
- 7.24. Ability to interface with GEO database to find inspector areas.
- 7.25. Use GIS information to create a suggested driving route for an inspector.
- 7.26. Ability to add attachments to the permit/license from a camera in the field.
- 7.27. Ability to customize the result codes of an inspection to our City's terminology.
- 7.28. Ability to associate a estimated amount of time with each inspection type, to allow for a daily "cap" of inspections if configured that way.
- 7.29. Be able to enter actual time for certain workflow items (inspection, plan review, etc.) and make that field required for particular workflow items, based on setup.
- 7.30. Integrate with an IVR system for customers to schedule inspections over the phone.
- 7.31. Allow customers to schedule inspections online.
- 7.32. Drag and drop scheduled inspections from one calendar day/inspector to another.
- 7.33. Group inspections (and permits) into a project hierarchy.
- 7.34. Ability to schedule and inspect by project and system will place the inspection on the correct permit (using discipline).
- 7.35. Condition of Approval on one permit affects associated permits - example: a shell permit with an open condition of approval that prevents a final inspection on associated permit(s).
- 7.36. Ability to schedule (or prevent scheduling if configured that way) the same inspection type being scheduled on the same permits for the same day.
- 7.37. Default in inspections by GEO code.
- 7.38. Define a required inspection list by permit type.
- 7.39. Access to GIS information in the field (link to City's GIS application).
- 7.40. Access to the permit data and related property information through a map service in the field.
- 7.41. Ability to configure security to assure that only authorized persons are allowed to sign off on an inspection.
- 7.42. Provide the appropriate capabilities to allow users to operate in the field with either hand-held devices or with laptop computers.
- 7.43. Store and Forward updates in the field then update the database when cell/internet connectivity is restored.
- 7.44. Immediate signoff of condition of approval upon inspection pass.
- 7.45. Allow scheduling by inspection group codes (scheduling of one inspection code actually schedules 2 or more inspections).

- 7.46. Ability to schedule reoccurring inspections (if configured that way).
- 7.47. Update permit/license status when a particular event occurs (example: final inspection).
- 7.48. Automatically issue C of O when final inspection passes and all requirements have been met.
- 7.49. Ability to store a service target for on time inspection completion (by inspection type and permit type).
- 7.50. Time based inspection scheduling via web.
- 7.51. Ability to place inspections specific hold (holds up inspections, but not permit activities).
- 7.52. Ability to schedule inspections during the various stages in the construction process to ensure compliance with State and local codes in person, by mobile application, web, and/or via phone (Interactive Voice Response (IVR) or operator).
- 7.53. Inspection results are obtained in person, mobile application, web, and/or via phone (Interactive Voice Response (IVR) or operator).
- 7.54. Inspection data is shared between other City departments to ensure code compliance.
- 7.55. Resources can be managed by district, inspector, inspector qualifications/type and location.
- 7.56. Inspection approvals are withheld until all conditions of approval, imposed by all inspection agencies, are met and all holds are released.
- 7.57. Certificate of Occupancy documents and final approval are issued after inspections and clearances have been completed.
- 7.58. System shall provide ability for authorized users request and schedule inspection and plan review appointments on-line. Include IVR and option to integrate with mobile hand held device.
- 7.59. System shall provide ability to track Erosion Control Deposits
- 7.60. System shall provide ability to track dates for;
  - 7.60.1. Pre-construction inspections
  - 7.60.2. Regular inspections
  - 7.60.3. Best Management Practice's (BMPs) installed and removed
  - 7.60.4. Post-construction BMP tracking, including inspections.
  - 7.60.5. Stop work orders
  - 7.60.6. Planting of vegetation
  - 7.60.7. Acceptance of vegetation coverage
  - 7.60.8. CO issuance (private projects)
  - 7.60.9. Project acceptance (CIP)
- 7.61. System shall provide ability to track inspection fees.
- 7.62. System shall provide native mobile applications allowing all inspection tasks to be completed remotely.
- 7.63. System shall provide ability to conduct an unlimited number of inspections relative to a permit.
- 7.64. System shall provide ability to identify inspection types based on user-defined parameters for data entry consistency.
- 7.65. System shall provide ability to keep track of a list of expected inspections based on permit type.
- 7.66. System shall provide ability to add inspections to the expected or scheduled inspections.
- 7.67. System shall provide ability to schedule routine inspections (i.e., annual housing inspections).

- 7.68. System shall provide ability to support remote data entry including recording inspections (manually or digitally).
- 7.69. System shall provide ability for Inspectors, to enter the results and related detail of inspections conducted while in the field (e.g., through laptops with wireless connection).
- 7.70. System shall provide ability to create a checklist of required inspections and prohibit the approval of a final inspection until all other required inspections are completed.
- 7.71. System shall provide ability to create a checklist of required inspection items during the inspection process.
- 7.72. System shall provide ability to indicate whether inspection is requested as a result of emergency or accident, with details.
- 7.73. System shall provide ability for departments and/or individuals to separately request inspections.
- 7.74. System shall provide ability to link images (including scanned images, photos, and written records, etc.) to an inspection record.
- 7.75. System shall provide ability to establish and manipulate the order of inspections so that inspection activities and scheduling can be efficiently coordinated between departments.
- 7.76. System shall provide ability to block inspections based on approved order of inspections.
- 7.77. System shall provide ability to schedule inspection times for departments that make appointments for individual inspections.
- 7.78. System shall provide ability for scheduling system to be customized to fit the unique needs of each division, e.g. voluntary, time allotted for each inspection, including scheduling for miscellaneous tasks, etc.
- 7.79. System shall provide ability to enter unlimited comments about the inspection.
- 7.80. System shall provide ability to automatically update the permit status to "completed" once all of the necessary final inspections have been approved and Certificate of Occupancy has been issued if needed.
- 7.81. System shall provide ability to prevent scheduling inspections until inspection, re-inspection, or investigation fees have been paid by the applicant.
- 7.82. System shall provide ability to prevent inspection approval until all appropriate user-defined pre-development conditions are met and accurate application and impact fees paid.
- 7.83. System shall provide ability to incorporate a list of alerts or notes into the daily inspection listings so that other inspectors, can be notified of particular issues with regard to a development (e.g., when a 'rough and framing' inspection is requested, the inspector would be notified that an "elevation certificate" is required for this property).
- 7.84. System shall generate a daily inspection schedule for each inspector based on type of inspection, location of inspection, or other user-defined criteria.
- 7.85. System shall provide the ability to schedule special Inspections that are required or mandated during construction.
- 7.86. System shall provide the ability to cancel inspections.
- 7.87. System shall provide the ability to schedule certain more complex inspections for more than standard inspection appointment time.
- 7.88. System shall provide the ability for applicants and building professionals to schedule inspections at any time and to cancel inspections before 8:30 a.m. the day of the scheduled inspection 24x7,

- using the Internet with a secure user logon and password feature limited to inspections related to the applicant and its other authorized users (i.e., inspectors).
- 7.89. System shall provide ability to receive referrals from other Departments, and send referrals to other departments regarding other inspections based on type of violation.
  - 7.90. System shall provide ability to schedule new inspections and issue new permits based on referrals from other Departments.
  - 7.91. System shall provide ability to conduct and electronically document and track inspections based on user-defined periods (e.g., annually, etc.).
  - 7.92. System shall provide ability to place holds, post notices until the applicant complies with specific condition(s).
  - 7.93. System shall provide ability to electronically schedule inspections, record completion, record results, and retrieve results.
  - 7.94. System shall provide ability to calculate fees due when number of paid inspections is exceeded.
  - 7.95. System shall provide ability to automatically retrieve updated related information from other areas of the System during inspections.
  - 7.96. System shall provide ability to record the following information about an inspection:
    - 7.96.1. Inspector/Employee
    - 7.96.2. Date and Time of Inspection Total Time for inspection
    - 7.96.3. Number of personnel conducting inspection
    - 7.96.4. Station (Fire Station and Crew)
    - 7.96.5. Inspection Results
    - 7.96.6. Correction Notices
    - 7.96.7. Notices of Violation
    - 7.96.8. Comments
  - 7.97. System shall provide ability to record violations from a list of standard violation codes.
  - 7.98. System shall provide ability to track violations based upon violation type, infraction type, and issuing division and department.
  - 7.99. System shall provide ability to track violation/correction issued to a person/entity or property, and be able to track multiple properties owned by one person or entity.
  - 7.100. System shall provide ability to allow for both written and electronic signature by issuing officer.
  - 7.101. System shall provide ability to indicate violation/correction severity status and indicate number of offense (e.g., first offense, second offense, etc.) and provide a count of the total number of individual violations by category defined by the department and cited on a notice of violation for management reports.
  - 7.102. System shall provide ability to document hazardous violations/corrections, the issuance of emergency orders, and the status of electrical, gas, and water utilities, bank foreclosures, and allow for systematic notifications to issuing department until compliance is achieved or routing is determined.
  - 7.103. System shall provide ability to track and control the request, review, approval, and issuance of any notice of violation and provide referral to and from other city agencies, and an order to seal the premises and the notification of appropriate parties (e.g., surveyors, owners, mortgage holders).

- 7.104. System shall provide ability to track and control the request, review, approval, and issuance, and appeal of a Stop Work Order.
- 7.105. System shall provide ability to enable, via workflow, progressive, proactive code enforcement based on business rules, including prevention of permit issuance and referrals to other Departments.
- 7.106. System shall provide ability to track process service (request and completion).
- 7.107. System shall provide ability to change violation status along with date.
- 7.108. System shall provide ability to track outcome of Director's Hearings (e.g., upheld, overturned, continued or returned to staff), and provide management reports delineating data for any queried time frame.
- 7.109. System shall provide ability to capture and bill for additional permit fees, penalties (e.g., per day, flat amount or based on permit fee) and code enforcement costs incurred including time and materials.
- 7.110. System shall provide ability to reverse or rescind violations and update all related information including violation number, violation type, issuing department/unit, reason for rescission, date of rescission, date of inspection, date of certificate of correction or affidavit, and permit application number.
- 7.111. System shall provide ability to track request for dismissal, appeal, correction, subsequent inspections, and removal of order (e.g., dismissal, certificate of correction).
- 7.112. System shall provide ability to track and control all requests from violation thru corrections.
- 7.113. System shall provide ability to allow authorized staff to rescind administrative and other substantive violations based on business rules (e.g., inspection results, submission of proof, research, etc.) including the ability to log, display and report all instances of rescission.
- 7.114. System shall provide ability to allow selected staff to remove violation based on owner/contractors submission of proof the violation has been corrected and that applicable fees/penalties payable to the City have been paid.
- 7.115. System shall provide ability to keep cancelled violations in history file.
- 7.116. System shall provide ability to, upon rescission request, allow for the scheduling of inspections, reporting of inspection results and determination of request disposition (e.g., granted, denied) and continuance and rescheduling of hearings.
- 7.117. System shall provide ability to prioritize enforcement cases by standards established by each department.
- 7.118. System shall provide ability to flag cases that are being appealed.
- 7.119. System shall provide ability to track requests and workflow for appeals as well as record results of appeals (e.g., granted, denied and rationale for each), including decision document (i.e. Notice of Decision and Order for Board of Appeals).
- 7.120. System shall provide internal validation of request for appeals (i.e., valid application number, following pre-defined chain of command).
- 7.121. System shall provide ability to internally assign or delegate requests for appeals and related appointment requests.
- 7.122. System shall provide ability for City staff to enter decision on appeals resulting from hearings.

- 7.123. System shall provide ability for Auditors and other authorized City staff to view and query database of appeal decisions made.
- 7.124. System shall provide ability to flag cases (e.g., conditional use, environmental review, building permit, letter of determination, variance, notice of violation, etc.) that are being appealed.
- 7.125. System shall provide the ability to input and track appeal-related data, including but not limited to: Appeal numbers; party names and contact information; permit number(s); and subject matter.
- 7.126. System shall provide alerts to staff when property owner response is overdue.
- 7.127. System shall provide ability for users to flag cases and request notification when actions are taken on the case (e.g., violation is abated).
- 7.128. System shall provide ability to regularly schedule health inspections for food service establishments, commercial swimming pools and spas, mobile food vendors, and temporary food service such as farmer's markets and special event vendors.
- 7.129. System shall provide ability to issue permits, assign tasks and track data for all health inspection tasks, including but not limited to routine inspections, complaint based inspections and investigations, commercial pool inspections, mosquito spraying and trapping, mobile food vendor inspections, farmer's market permits and temporary food vendors.
- 7.130. System shall provide ability to track all animal control issues including but not limited to call outs, animal bites, warnings issued, tethered animals, citations, cruelty investigations, impoundments, traps set, livestock calls, and barking complaints.
- 7.131. Provide a way to cross reference owner's names, addresses and maybe animal registration tag numbers or micro- chips to identify animals that may have a history at a certain address but may move to other locations ...owners change names etc...so a way to query that it may be the same animal...involved in multiethnic incidents.
- 7.132. Ability to track a fee, e.g., a re-inspection fee, deferred submittal or revisions that results in additional fees, that will become due when a future activity occurs, e.g. at final inspection.
- 7.133. System shall provide ability to calculate, assess, and track all penalty fees associated with code enforcement.
- 7.134. The mobile workforce solution (inspection) module must be able to interact with GIS data without latency issues.



## 8. Customer Relationship Management (CRM)

- 8.1. The approved vendor shall provide a Customer Relationship Management (CRM) solution.
- 8.2. The general public (citizen, vendor, contractor, developer, business, etc.) shall be able to access the system and easily and intuitively be able to navigate to the information they are looking for for their transaction (i.e. apply for a permit, check its status, file a complaint, etc.).
- 8.3. Citizen access to permit, workflow, conditions, inspections, etc. from desktop browser or mobile device.
- 8.4. Citizen access to online permit/license submittal (renewable and non-renewable permit/license types).
- 8.5. Have a work center where internal staff can view all of the workflow items (customer request work orders) assigned to them (or their workgroup) along with target dates for completion.
- 8.6. Ability to view a history of all updates/changes to a customer request, work order, workflow item, etc. (showing old value, new value, updated by, etc.).
- 8.7. System shall provide ability to use electronic notification (e-mail) to external stakeholders to inform them of any related notification.
- 8.8. System shall provide ability to track storm water complaints and comments.
- 8.9. System shall provide customer relationship management functionality including integrated management of correspondence.
- 8.10. System shall provide ability to capture and display information about contacts and interactions with customers (e.g., property owners, applicants, licensees, contractors, real estate industry, lawyers, other agencies, and complainants).
- 8.11. System shall provide ability to track submissions by client, as to progress working through the multi-department approval process(es).
- 8.12. System shall provide ability to track and view progress of submission with knowledge of standard time length for submission.
- 8.13. System shall provide client opportunity to email city submission manager regarding questions as to progress while reviewing process.
- 8.14. System shall be highly graphic in communication style to client vs. a standard long written text format.
- 8.15. System shall allow for tracking of street light requests, traffic signal requests, complaints of speeding, signage requests, pavement marking requests, and other transportation related requests, including approval process.
- 8.16. System shall provide a project/complaint tracking module that tracks citizen initiated traffic concerns from initial complaint through completion or resolution. The tracking module shall track relevant data including, but not limited to:
  - 8.16.1. Project ID number
  - 8.16.2. Title of project
  - 8.16.3. Location of project
  - 8.16.4. Assigned personnel
  - 8.16.5. Status
  - 8.16.6. Due date
  - 8.16.7. Priority
  - 8.16.8. Category
  - 8.16.9. Start date

- 8.17. System shall allow for creation of task list and ability to assign various tasks to associated personnel.
- 8.18. System shall provide for scheduling of tasks and due dates and provide for alerts or notifications of deadlines.
- 8.19. System shall allow for inputting notes with each task to allow staff to properly track and report on progress and task completion.
- 8.20. System shall allow Complaints to be submitted over the Web.
- 8.21. System shall provide ability to open a case (complaint) and record, store, and retrieve the following information:
  - 8.21.1. Address of problem
  - 8.21.2. Block and Lot Number of problem
  - 8.21.3. Location of problem on property or in structure
  - 8.21.4. Type of Case (e.g., building, plumbing, housing, etc.)
  - 8.21.5. Contact information for problem site
  - 8.21.6. Property Owner Information
  - 8.21.7. Property Manager Information
  - 8.21.8. Type of Property
  - 8.21.9. Description of problem (unlimited text)
  - 8.21.10. Date of Case (complaint) Opening
  - 8.21.11. Source of case (complaint) (e.g., City employee, citizen)
  - 8.21.12. Employee who received information
  - 8.21.13. Integrate with permitting database including enforcement database
  - 8.21.14. Status of problem (New, Under Investigation, Closed, etc.)
- 8.22. System shall provide ability to prioritize cases based on City-defined parameters (e.g., health and safety issues).
- 8.23. System shall provide ability to record, store, and retrieve information associated with an established case (complaint), including the following:
  - 8.23.1. Date of contact
  - 8.23.2. Type of contact (e.g., correspondence, telephone call)
  - 8.23.3. Staff making contact
  - 8.23.4. Full text of any correspondence with property owner letter, if sent
  - 8.23.5. Comments
  - 8.23.6. Referral to another Department or Agency
  - 8.23.7. Legal Action
  - 8.23.8. Inspections
- 8.24. System shall provide ability to create a reminder or “tickler” so that the user is alerted to the next required action for a particular case (complaint).
- 8.25. System shall provide ability to assign a primary tracking number to each case (complaint) and assign sub-numbers to track related activities.
- 8.26. System shall provide ability to track all stages of the Housing Code complaint and systematic enforcement including:
  - 8.26.1. Case intake,
  - 8.26.2. Notice issuance,
  - 8.26.3. Administrative citation issuance,
  - 8.26.4. Administrative hearing and appeal tracking,
  - 8.26.5. Notification and outcome,
  - 8.26.6. Correspondence issuance,

- 8.26.7. Automated billing to property owner for code enforcement actions,
- 8.26.8. Referrals to other city and state agencies archive and retrieval of hard copy & electronic documents,
- 8.26.9. Digital photos/video,
- 8.26.10. Case close-out, while providing all manner of statistical data for management reports related to: inspector productivity, violation types sorted by number, inspection district, supervisorial district, designated study area, with ability to: digitize and map the location of code enforcement cases in a layered fashion by violation type.
- 8.27. System shall provide ability to track all stages of the Work Practices For Lead-Based Paint (SFBC Section 3423) complaint and systematic enforcement including:
  - 8.27.1. Case intake,
  - 8.27.2. Notice issuance,
  - 8.27.3. Administrative citation issuance,
  - 8.27.4. Penalty issuance, administrative hearing and appeal tracking,
  - 8.27.5. Notification and outcome,
  - 8.27.6. Correspondence issuance,
  - 8.27.7. Automated billing to property owner for code enforcement actions,
  - 8.27.8. Referrals to other city and state agencies,
  - 8.27.9. Archive and retrieval of hard copy & electronic documents,
  - 8.27.10. Digital photos/video,
  - 8.27.11. Case close-out, while providing all manner of statistical data for management reports related to: inspector productivity, violation types sorted by number, inspection district, supervisorial district, designated study area, with ability to: digitize and map the location of code enforcement cases in a layered fashion by violation type.
- 8.28. System shall provide ability for the public to request an appeal through the Internet, including scheduling with appropriate staff and tracking of outcomes.
- 8.29. System shall provide ability to inquire and report on requests for appeals.
- 8.30. System shall provide ability for applicant to submit multiple appeals.
- 8.31. System shall provide ability for applicants to view their history of appeals requests.
- 8.32. Permit/License Applicants can renew online (including updating quantities, recalculating and paying fees, if configured that way).
- 8.33. Ability to bill or cancel all fees for a customer (across multiple permits/licenses) as well as fees within any given permit/license.
- 8.34. Ability to tie an escrow account to a customer.
- 8.35. Ability to hold and monitor a deposit for licensing at the customer level (not escrow, but a penalty to ensure prompt payment).
- 8.36. Ability to give customer a discount on a fee if they pay before a predetermined date.
- 8.37. System shall provide ability to provide for possible partial refund of fees already paid.
- 8.38. Provide an on-line fee estimator/calculator that allows customers to estimate their fees for their transaction.

- 8.39. System shall provide the ability to send the payment transaction through a common City-wide payment processing engine in encrypted form.
- 8.40. System shall provide ability to process alternative methods of payment including, but not limited to:
  - 8.40.1. On-account deposits
  - 8.40.2. Electronic Funds Transfer

**9. Capital Improvement Program (CIP)**

- 9.1. The approved vendor shall provide a Capital Improvement Program (CIP) solution.
- 9.2. System shall provide a coordinated system for the tracking of CIP projects from concept to close out of the project.
- 9.3. System shall provide ability to approve, deny and track storm water development and construction projects.
- 9.4. The processing of a development project can be thought of as a set of modules for evaluating or approving various aspects of the project—such as evaluating the environmental impact of a project or approving a variance on the amount of required parking. The solution must accommodate invoking these modules in a variety of combinations and in different orders, along with workflow and time tracking mechanisms.
- 9.5. System shall provide ability to create a master project number and associate all permits related to the project with that master project number.
- 9.6. System shall provide ability to capture related items of project information including, but not limited to:
  - 9.6.1. Project name and aliases
  - 9.6.2. Project address
  - 9.6.3. Project description (of unlimited text space)
  - 9.6.4. Block and lot number
  - 9.6.5. Census tract and block group.
  - 9.6.6. Ability to define project timelines and schedule project milestones.
  - 9.6.7. System shall capture Project Concept, including but not limited to:
    - 9.6.8. Location
    - 9.6.9. Conceptual cost - allow for auto inflation based on project schedule
    - 9.6.10. Justification - rating criteria to compare and rank projects
    - 9.6.11. Length, ADT, accident data, etc.
    - 9.6.12. Project rankings
    - 9.6.13. Priorities based on City Council objectives
- 9.7. System shall capture Project Budget, including but not limited to:
  - 9.7.1. Locked except to budget staff
  - 9.7.2. Visible to all
  - 9.7.3. Design, land acquisition, construction, equipment, management, other
  - 9.7.4. Contracts automatically added and tracked when approved
  - 9.7.5. Tracking of multiple funding sources
  - 9.7.6. Combining and/or splitting projects
  - 9.7.7. Moving funds between projects
  - 9.7.8. Tracking of which bid items are charged to which funding source

- 9.7.9. Validate existence of funding before allowing project to proceed
- 9.7.10. Coordinate with finance department to encumber budget line items and make payments from appropriate sources
- 9.8. System shall capture Project Contracts, including but not limited to:
  - 9.8.1. Design, construction, survey, geotech, etc.
  - 9.8.2. Scanned copies of documents
  - 9.8.3. Tracking of contract days, funding amounts, expenditures, etc.
  - 9.8.4. Tracking and reporting of meetings and issues discussed
  - 9.8.5. Schedule tracking, milestone dates
  - 9.8.6. Change order tracking and reporting
  - 9.8.7. Contractor auto submittal and routing to and through City Manager for approval
  - 9.8.8. Issuance of approval
- 9.9. System shall capture Project Reviews, including but not limited to:
  - 9.9.1. Plan reviews, approval
  - 9.9.2. Scanned copies of plans and markups - this could be included in paperless plan review
  - 9.9.3. Scanned copies of approved documents and plans
- 9.10. System shall capture Project Inspections, including but not limited to:
  - 9.10.1. Automated inspection reporting
  - 9.10.2. Daily and weekly reports
  - 9.10.3. Photo attachments
  - 9.10.4. File organization allowing for document/data retrieval
  - 9.10.5. Tracking of bid items
  - 9.10.6. Recording of testing reports
  - 9.10.7. Automated process for tracking and completing required inspections (embed, subgrade, steel, etc.)
- 9.11. System shall capture Project Quantities/Estimating, including but not limited to:
  - 9.11.1. Created by contract - modified by Change Order
  - 9.11.2. Tracked by inspectors and pay requests
  - 9.11.3. Can be queried for estimates at any time
  - 9.11.4. Common items across all projects
  - 9.11.5. Reporting
  - 9.11.6. Contracted quantities locked unless formally altered by Change Order
- 9.12. System shall capture Project Dashboard, including but not limited to:
  - 9.12.1. Same at a glance information for all projects
  - 9.12.2. Budget, encumbrances, expenditures, available funding - for each category
  - 9.12.3. Graphs illustrating key information
  - 9.12.4. Pending actions (inspections, reviews, etc) for all people involved in project
  - 9.12.5. Most recent actions
  - 9.12.6. Basic project information (location map, description, status)
  - 9.12.7. Pending issues and problems
- 9.13. System shall capture Personal (Customized) Dashboard, including but not limited to:
  - 9.13.1. Customizable
  - 9.13.2. Pending and recent actions
  - 9.13.3. Add financials for multiple projects

- 9.13.4. Add all actions for multiple projects
- 9.13.5. Link directly to project dashboards for managed projects
- 9.13.6. Ability to link to other projects by personal preference
- 9.13.7. Supervisors have access to personal dashboards of staff
- 9.13.8. Ability to view a history of all updates/changes to a project (showing old value, new value, updated by, etc.).
- 9.14. System shall provide ability to link a master project to multiple subordinate projects.
- 9.15. System shall provide ability to allow a subordinate project to become a master project for another level of sub-projects.
- 9.16. System shall provide ability to prevent a master project from being finalized until all subordinate projects are finalized.
- 9.17. System shall provide ability to allow multiple projects for either a single address or multiple addresses to be tied to a parcel.
- 9.18. System shall provide ability to allow a project to have project level status in addition to other statuses and dispositions.
- 9.19. System shall provide ability to change project levels due to changes in the project.
- 9.20. System shall provide ability to display and report on the outstanding work load of assigned, unassigned and completed projects by pre-defined selection criteria, including work unit and planner.
- 9.21. System shall provide ability to enter project specific conditions that affect all elements associated with the project.
- 9.22. System shall provide ability to retrieve and edit existing project specific conditions upon selection of a project.
- 9.23. System shall provide ability to display conditions associated with a project in reverse chronological order of entry.
- 9.24. System shall provide ability to link and unlink different elements such as building permits, grading reports and orders to a project.
- 9.25. System shall provide ability to link conditions of approval to a project.
- 9.26. System shall provide ability to link grading concept approval information to project record, including conditions and issuance date.
- 9.27. System shall provide ability to link zoning conditions of approval and site plan conditions of approval to project record, including when and by whom a condition must be met.
- 9.28. System shall provide ability to link associated documents, such as those created in MS-Word, MS-Excel, CAD drawings or other formats, to the project.
- 9.29. System shall provide ability to record various comments and notes and retain with file records.
- 9.30. System shall provide ability to access all Planning information relevant to a particular project or parcel, including but not limited to: zoning, topography, past and current entitlements, solar information, and historic resources designations.

## **10. Data Migration**

- 10.1. Migrate data from the following systems:
  - 10.1.1. SunGard HTE
  - 10.1.2. Fire Works
  - 10.1.3. Access Databases
- 10.2. Ability to create "custom" fields if necessary (for data fields from the legacy system that need to be tracked but have no corresponding field in new system)

- 10.3. Utilize any existing migration path (including scripts, etc.) for migrating data from other systems to the approved vendor's product as applicable.
- 10.4. Export and import system configuration/setup values in "pieces" (example: permit setup, defaults, etc.).

## 11. Interface Development

### 11.1. Develop the following interfaces:

- 11.1.1. SunGard HTE (AS400 system) to exchange financial and time management data.
- 11.1.2. Ability to support a real-time interface with the City's cashiering system or inquiry, payment posting, and reporting for daily reconciliation. Timely processing of real-time payment request from Cashiering system.
- 11.1.3. Fire Management System for parcel/property/occupancy/hazmat information and inspection history.
- 11.1.4. City Website/Portal for information, applications, status and reports.
- 11.1.5. City's Legislative and Agenda Management System (Legistar)
- ~~11.1.6. City time tracking databases (Execu-Time & SDE Payroll) with a single point of entry. System shall support multi-users within and between departments, all sharing a central time tracking database (Execu-Time) with ability to report on recorded time entered by all users to bill customers as needed.~~
- 11.1.7. GIS: Ability to extract, transform & load parcel records supplied from other organizations (e.g., County Recorder, County Assessor, etc.) on a scheduled basis. This process should have the capability to detect and easily reconcile changes, such as (parcel splits and combines) while preserving history that may have been made internally and externally.
- 11.1.8. Interface with GEO Database (pull Bond and Fee form quantities from GEO database uses for Asset Management).
- 11.1.9. Interface with Interactive Voice Response (IVR) system to schedule and receive the status of inspections.
- 11.1.10. County Animal Control to provide the status/disposition of animal control cases.
- 11.1.11. Interface with State Contractors Board to validate that professionals have a valid license. Ability to interface with State Contractor Board (SCB would provide a data file daily that would be used to upload state contractor numbers and state contractor status to the licensing/permitting system on existing licenses).
- 11.1.12. System shall provide ability to electronically link to the City of McKinney and County Tax System (i.e. to know if tax abatement was approved).
- ~~11.1.13. System shall provide ability to electronically link to the Texas State Workers Compensation system.~~
- 11.1.14. The solution will integrate with Active Directory, the City's standard authentication method via LDAP/LDAPS protocols without requiring modifications to the Active Directory schema.
- 11.1.15. The solution shall integrate with Microsoft Lync 2013.
- 11.1.16. System shall provide ability to easily integrate with standard Microsoft Office products, including MS Word, MS



- Excel, MS Access, MS Outlook, PowerPoint, and MOSS 2010 (SharePoint).
- 11.1.17. System shall provide ability to perform bi-directional link/transform between call center, service request, work orders, and field entry devices.
  - 11.1.18. Ability to interface to system from dispatching system (for Hazardous Material quantities, contact information, etc.) using web services.
  - 11.1.19. System shall integrate with document/records management system (Laserfiche) and provide metadata associated with documents/records for greater search ability/access.
  - 11.1.20. System shall interface with Tableau reporting server.
  - 11.1.21. System shall interface with syslog-ng for log management.
- 11.2. The solution shall be able to interface with other systems via web services.
  - 11.3. System shall provide the ability to accept data from interfaced systems including, but not limited to, work order, customer relationship management, etc.
  - 11.4. System shall provide ability to accommodate necessary interfaces as new external systems are developed.
  - 11.5. System shall utilize industry-standard Application Programming Interfaces (API), adapters, adapter development kits and similar enterprise application integration (EAI) tools to facilitate data transmission and exchanges including:
    - 11.5.1. Permit application submittals
    - 11.5.2. Status inquiries
    - 11.5.3. Plan, map or diagram submittals
    - 11.5.4. General neighborhood inquiries
    - 11.5.5. Inspection requests
    - 11.5.6. Correspondence, linking directly to on-line project file
  - 11.6. System shall provide ability to interface with existing City systems that are using a variety of database systems such as MS Access and SQL Server DB standards.
  - 11.7. System shall provide the ability to interface with all departments (Public Works, Fire Department, Public Health, etc.) as part of a direct-connect / SOA architecture.

## **12. Report, Form Letter Development & Documentation**

- 12.1. System data shall automatically populate to a reporting server to reduce load on operational system. Data shall be in a de-normalized format and shall utilize terms that are easily identifiable to end-users.
- 12.2. System shall provide ability to create basic or ad-hoc reports using any data field and other end-user parameters without requiring technical staff or expertise to create and publish them.
- 12.3. System shall provide analytical tools such as data warehousing and business intelligence, to harness the efficiency and effectiveness of the operations.
- 12.4. System shall be able to provide statistics on permit, case, review, inspection, and work order processing times (such as highest, lowest, range, mean, median, mode, and standard deviation) by customer, owner, applicant, employee, department, division, etc.

- 12.5. System shall be able to provide qualitative data (such as number and type of defects/defectives) on permits, cases, reviews, inspections, and work orders by customer, owner, applicant, employee, department, division, etc.
- 12.6. System shall provide user friendly, simple, configurable reports for use in office and in the field.
- 12.7. Flexible reporting structure, allowing end users to run canned reports and create ad hoc reports supporting exporting in a variety of file types (excel, delimited text, pdf, xml, txt).
- 12.8. System shall provide ability to enable report selection and generation from within the application screens.
- 12.9. Ability to view a history of all updates/changes to a report, form letter, and document (showing old value, new value, updated by, etc.).
- 12.10. Ability for an applicant to download and print a copy of their current permit/license.
- 12.11. System shall provide a data retrieval interface that is simple to navigate and allows for retrieval of information (e.g. cases, complaints, violations, permits, applications, ownership information) on a single property or on a set of dynamically grouped properties.
- 12.12. System shall allow for retrieval of information regarding permit & case status, including permit & case applications, issuances, renewals, expirations, etc.
- 12.13. System shall allow lookup of code violations and judgments associated with people, properties, etc.
- 12.14. System shall present data to users such that a minimum of navigational effort is required. The data elements required completing a job function, whether to inquire/read only or data entry, must be readily available.
- 12.15. System shall provide a user interface that integrates information from multiple components into a unified display by business area or work type.
- 12.16. System shall provide a method to "drill down" to related data as needed by job function.
- 12.17. System shall provide ability to automatically generate ad-hoc notices based on block and lot.
- 12.18. System shall provide ability to generate copies of the CO and pre-addressed envelopes for mailing to owner, lender and other designated parties.
- 12.19. Ability to print a permit that shows all holds, warnings, conditions of approval, etc.
- 12.20. System shall capture and provide ability to report on type of permit (e.g., building, plumbing, electrical, etc.).
- 12.21. System shall capture and provide ability to report on type of use by unit and square footage (e.g. commercial, industrial, single family, etc.).
- 12.22. System shall capture and provide ability to report on information related to contractor.
- 12.23. System shall capture and provide ability to report on information related to block and lot.
- 12.24. System shall capture and provide ability to report on information related to occupancy classifications (e.g. mixed-use) and be able to select multiple occupancy (OCC) types (e.g. B/S-1).
- 12.25. System shall capture and provide ability to report on information related to zoning.

- 12.26. System shall provide ability to use user-created/user-defined fields for incorporating into reports, printed permits and other types of required outputs.
- 12.27. System shall provide ability to generate management reports on project, case, permit performance metrics, measured by both planner and timeframes.
- 12.28. System shall provide ability to support an agenda service.
- 12.29. System shall provide ability to post scheduled hearing to calendar maintained by the City.
- 12.30. System shall provide ability to create hearing agenda.
- 12.31. System shall provide ability for electronic routing and circulation of agenda for review.
- 12.32. System shall provide ability to prepare hearing and public notice(s).
- 12.33. System shall provide ability to record hearing notice preparation date.
- 12.34. System shall provide ability to generate notices using following formats:
  - 12.34.1. Postcards
  - 12.34.2. Letters
  - 12.34.3. E-mail
  - 12.34.4. Web site posting
- 12.35. System shall provide ability to interface with GIS to generate mailing lists for notices to owners and occupants of parcels within a given distance (e.g. 300' or 200') of subject parcel.
- 12.36. System shall provide ability to avoid duplication of notice/label sent to an address.
- 12.37. System shall provide ability to print mailing labels.
- 12.38. System shall provide ability to maintain distribution list, including subscriber, e-mail address, start date and expiration date.
- 12.39. System shall provide ability to publish hearing agenda and support materials to the City's web site.
- 12.40. System shall provide ability to automatically produce requested letters and labels upon demand.
- 12.41. System shall provide ability to automatically generate reports identifying property owners who are delinquent on their post-occupancy reporting.
- 12.42. System shall provide ability to generate regular and ad-hoc reports on changes to the structure/unit/legal use baseline information within geographical areas and over user-specified timeframes.
- 12.43. Ability to automate a correction letter or email with the completion of an activity.
- 12.44. System shall provide ability to accumulate comments from all reviewers and issue one letter that consolidates all comments.
- 12.45. Notification is provided to customers upon completion of plan review process.
- 12.46. On-line printing of e-stamped plans.
- 12.47. Ability to create a text document combining static text and field values (conditions of approval, applicant, contact, etc.) from a specific permit/license and automatically route to email address of owner, contact, and/or applicant (as selected by internal user).
- 12.48. Ability to print a Certificate of Occupancy and a copy of that C of O be available online.

- 12.49. Documentation is generated as required by type of application including but not limited to day notices, job cards, and permit documents.
- 12.50. System shall provide ability to track an industrial facility's Notice of Intent (NOI) and sector (A-AD) and all NOI's.
- 12.51. System shall provide ability to track Storm Water Notices of Violation (NOV).
- 12.52. System shall provide ability to track incorporated Letters of Map Revision (LOMRs).
- 12.53. System shall provide ability to track non-incorporated Letters of Map Revision (LOMRs).
- 12.54. System shall provide ability to track Conditional Letter of Map Revision (CLOMR), Letter of Map Amendment (LOMA), and Letter of Map Revision based on Fill (LOMR-F).
- 12.55. System shall provide ability to manage large mailings including creation of mailing labels (e.g., for mailing of notices).
- 12.56. System shall provide ability to download the captured information into form letters and notices of violation.
- 12.57. Ability for field inspectors to print documents stored in the system in the field.
- 12.58. Performance statistics are tracked for adherence to pre-determined Service Level Objectives including time between request and inspections, response time to complaints, abatement of notices of violations and other types of request based on the permit criteria.
- 12.59. System shall provide ability to track Erosion Control Notice Of Intent (NOI), Construction Site Notice, and Notice of Termination (NOT).
- 12.60. System shall provide ability to print case (complaint) information reports for use by inspectors in performing inspections.
- 12.61. System shall provide ability to generate a Certificate of Occupancy or final approval document when final inspections have been approved.
- 12.62. System shall provide ability to automatically generate a letter to the permit contact person when there have been no inspections on a permit based on a user-defined parameter (e.g., 180 days).
- 12.63. System shall provide ability to obtain a printout showing all inspections scheduled for user-defined period and applicant/company name.
- 12.64. System shall provide ability to print and issue correction notices at property sites.
- 12.65. System shall provide ability to notify all needed departments upon issuance of any notice of violation or order to seal the premises.
- 12.66. System shall provide automatic notification of inspection results to departments or divisions that have issued notices of violation on a property that can be resorted by violation category or geographic region of the building inspected.
- 12.67. System shall provide ability to notify appropriate parties of a Stop Work Order.
- 12.68. System shall provide ability to produce printed warning letters.
- 12.69. System shall provide ability to report delinquencies where referral responsibilities are not completed in a timely manner.
- 12.70. System shall provide ability to automatically route required electronic data (e.g., inspection data, photos, report of legal use and zoning, and title report) to the City Attorney for legal action.

- 12.71. System shall provide ability to associate and share electronic data (e.g., inspection data, photos, report of legal use and zoning, and title report) to related violation record, summons or case number.
- 12.72. System shall provide ability to allow enforcement staff to automatically generate notices of violation and other correspondence (e.g., hearing notices and continuances).
- 12.73. System shall provide ability to produce notices instructing property owner that permits are required and to issue a Notice of Violation when permit applications are not filed. The Notice of Violation is the mechanism which requires and compels the permit filing.
- 12.74. System shall provide ability to, upon rescission of vacate order, notify all necessary City departments or divisions.
- 12.75. System shall provide ability to inquire and report on the volume of enforcement cases and other related statistics.
- 12.76. System shall provide ability to record results of appeals (e.g., granted, denied and rationale for each), including decision document (i.e. Notice of Decision and Order for Board of Appeals).
- 12.77. System shall provide ability to automatically schedule and send notification of hearings if request for appeal is accepted by the City.
- 12.78. System shall provide ability to inquire and report on the volume of appeals and other related statistics.
- 12.79. System shall provide ability to produce printed legal papers for legal action against non-compliant property owners.
- 12.80. System shall provide ability to produce printed notification to non-compliant property owners.
- 12.81. System shall provide ability to modify violation/correction notices.
- 12.82. Specified events (printing Business License certificates, notices, etc.) can be set up to automatically occur upon renewal.
- 12.83. System shall provide ability to allow staff to automatically generate notices of expiration for permits.
- 12.84. Ability to send out expiration notification letters to the permit/license contact a specified number of days prior to (or after) the expiration of the application.
- 12.85. System shall capture CIP Reports, including but not limited to:
  - 12.85.1. Internal staff reports - details
  - 12.85.2. Internal administrative reports
  - 12.85.3. Council reports
  - 12.85.4. Public reports
  - 12.85.5. Schedule reports for multiple custom projects
  - 12.85.6. Neighborhood information
  - 12.85.7. Closure notices/service interruptions
  - 12.85.8. Task reports
  - 12.85.9. Inspection review reports
  - 12.85.10. Punch-lists
  - 12.85.11. Contract notifications (time)
  - 12.85.12. Issue notice to proceed through system
  - 12.85.13. Same as Dashboard at a glance information for all projects
  - 12.85.14. Budget, encumbrances, expenditures, available funding - for each category
  - 12.85.15. Graphs illustrating key information

- 12.85.16. Pending actions (inspections, reviews, etc) for all people involved in project
- 12.85.17. Most recent actions
- 12.85.18. Basic project information (location map, description, status)
- 12.85.19. Pending issues and problems
- 12.86. System shall provide the ability to perform Queries, including but not limited to:
  - 12.86.1. Query contractor history
  - 12.86.2. Cost
  - 12.86.3. Time
  - 12.86.4. Performance
  - 12.86.5. Populate old projects over time to provide better historical results and to supplement bid history
  - 12.86.6. Query bid item history
  - 12.86.7. Cost change
  - 12.86.8. Performance rate
- 12.87. System shall provide Communication, including but not limited to:
  - 12.87.1. Push required communication through system to be tracked and archived
  - 12.87.2. File project emails in the system
  - 12.87.3. Citizen concern tracking
  - 12.87.4. General phone and meeting logs
  - 12.87.5. Store agendas, notes, recordings, etc.
- 12.88. Ability to record directly into system
- 12.89. Adjust based on quantity bid
- 12.90. Ability to print a receipt with detailed breakdown of fees paid, and "roll up" (summary) view of the receipt for the customer, if configured that way.
- 12.91. In reporting, differentiate penalty fees from other fee types.
- 12.92. Ability to inquire and report on cash receipts for reconciliation.
- 12.93. The ability to define milestones during a permit life cycle that can be used to determine how far along in the permitting process the permit is (percentage complete) for reporting purposes.
- 12.94. Ability to automatically generate letters when actual fees or charges exceed initial assessed fee or charge.
- 12.95. Ability to bill customer for outstanding fees.
- 12.96. Ability to report on escrow accounts.
- 12.97. Ability to print a permit/license from cashiering system and send a copy to Records.
- 12.98. System shall provide ability to generate invoice for fees owed.
- 12.99. System shall provide ability to generate notice to appellant that explains hearing dispositions and decisions and itemizes any fee adjustments.
- 12.100. System will produce automatic billing letters when the time spent exceeds the initial fee.
- 12.101. System shall provide ability to generate an itemized receipt and record the associated Treasurer's receipt number with each fee transaction.
- 12.102. System shall provide ability to inquire and obtain listing of previously made payments by application number or other user-defined parameters.

- 12.103. System shall provide ability to inquire and report on cash receipts for reconciliation.
- 12.104. System shall provide ability to send notifications to Assessor's Office based on user-defined parameters.
- 12.105. System will generate quarterly reports for billing to other Agencies for miscellaneous permit review.
- 12.106. System shall provide ability to improve management and staff accountability through the production of reports that will alert users of pending and overdue work.
- 12.107. System shall be able to report on the status of pending permit applications.
- 12.108. System shall be able to report on the number of expired permits by time period and other parameters.
- 12.109. System shall be able to report on the number of active CRM cases/complaints and their status.
- 12.110. System shall provide the user with the ability to "drill down" from a transaction level to the respective and supporting source records regardless of module source.
- 12.111. Scheduled running of reports with specified parameters and automatic distribution of those reports via email.
- 12.112. System shall provide ability to schedule reporting (with and without end-user input parameters).
- 12.113. System shall provide ability to schedule frequent or lengthy reports to run at specified times.
- 12.114. System shall provide ability for report distribution via on-line, print, e-mail, PDF, etc.
- 12.115. System shall provide the ability to monitor and report on key performance metrics at the strategic and operational levels for internal processes and key financial/non-financial indicators.
- 12.116. System shall provide tools for benchmarking performance to compare processing times between users and across projects and departments based on user-defined parameters.
- 12.117. Ability to "trigger" a report run when a particular event occurs.
- 12.118. Customizable automatic email reminders when project, inspection, license, etc., is coming due, is past due, etc.
- 12.119. Provide a friendly reminder that it's been awhile since we returned plans to you.
- 12.120. System shall provide ability to generate appropriate notices for each case type (e.g., notices to community residents based on proximity to subject property).
- 12.121. Ability for permit/license applicants to select their preferred method of contact (paper, email, view online) for email invoices, expiration notices, etc.
- 12.122. System shall provide ability to maintain a list of those individuals or entities who subscribe to the block book notation service for notification of hearings and/or staff reports related to an address, and automatically generate notices.
- 12.123. System shall provide ability to maintain a contact list and log of contacts.
- 12.124. System shall provide ability to record notice date and maintain electronic copy of notice.
- 12.125. System shall provide ability to record names and addresses of those to whom each notice is sent.

- 12.126. System shall provide ability to issue notice through mail, e-mail, fax, or web site, if previously requested.
- 12.127. System shall provide the ability for public notices and hearing information:
  - 12.127.1. Public notice list
  - 12.127.2. Dates of public comment period
  - 12.127.3. Public hearing date, time, place, and type
  - 12.127.4. Hearing results
  - 12.127.5. Date of notice of decision
- 12.128. Ability to link associated documentation to a permit/license, parcel, or inspection record (i.e. image files, PDF, Word, Excel, PowerPoint/Keynote, etc.).
- 12.129. System shall adhere to Records standards and be DOD 5015 compliant.
- 12.130. System shall provide ability to manage and track correspondence where the correspondence can be retrieved based on either project or contact.
- 12.131. System shall provide ability to proactively generate correspondence to constituents based on business rules.
- 12.132. Plan tracking for location and routing of physical plans, number of copies, etc.
- 12.133. System shall support document management, either as API with third party application and/or linked technology, with version control features. Use of embedded documents are not recommended for this organization.
- 12.134. Ability to link to related documents for a permit/license/parcel within document management system via a URL.
- 12.135. Ability to view a mass export of all electronic documents for a particular permit/license/parcel.
- 12.136. Ability to track cancellation date, expiration date, and passed final inspection date and have that information easily accessible.
- 12.137. Ability for document management system to interface with (via web service, etc.) new permit/licensing system to delete references to expired documents (Manual or Automatic?).
- 12.138. Ability to interface with scanning system (Laserfiche) to extract metadata.
- 12.139. Scan documents OCR metadata, tie to data in Land Management/Permitting system.
- 12.140. Integrate retention schedule codes based on document type (template).
- 12.141. Place holds based on litigation which holds/keeps people from deleting documents even if those documents are past their retention schedule (i.e. inspection results, etc.).
- 12.142. Expunge data from database based on records retention schedule with audit trail identifying when data was expunged.
- 12.143. Ability to restrict visibility of document types based on document type and end user role.
- 12.144. Ability to provide folder structures and naming protocols (standards) for associated documents.
- 12.145. Electronic plan review/revisions/final design/as-builts stored in Records Management System/Document Management System and linked to Land Management/Permitting system.



- 12.146. Standardize metadata (i.e. parcel number, project name, owner/applicant, etc.) associated with each document type in same location on document (require customer to provide).
- 12.147. Ability to OCR metadata of electronic submittals.
- 12.148. Ability to mark certain related documents as confidential (only viewable to select staff).
- 12.149. System shall provide on-line access to Code, Policy Procedures Notifications (PPNs), Zoning Resolution, Zoning Administrator Interpretations, General Plan, Area Plan guidelines, fee schedules, etc., with full text search, Boolean, and wildcard.
- 12.150. System shall provide ability to select Code provisions with links to interpretations.
- 12.151. System shall provide workflow for the review and revision of policies and procedures with other City departments and industry representatives.
- 12.152. System shall provide ability for users to receive e-mail notification of updates and other reference materials.
- 12.153. System shall provide ability to accept and link all supporting electronic documents to the application and e-mails (e.g., plans).
- 12.154. System shall provide ability to prepare and store documents using standard templates for each case type that are compatible with MS-Office applications (e.g. MS-Excel, MS-Word), including, but not limited to:
  - 12.154.1. Initial staff comments and subsequent review comments
  - 12.154.2. Staff reports
  - 12.154.3. Case reports
  - 12.154.4. Motions
  - 12.154.5. Certificate of Appropriateness
  - 12.154.6. TDR Letters
  - 12.154.7. Letters of Determination (Zoning Administrator Letters and Zoning Verification Letters)
  - 12.154.8. Notices of Violation
  - 12.154.9. Initial Studies (Environmental Review)
  - 12.154.10. Negative Declarations (Environmental Review)
  - 12.154.11. Environmental Impact Report
  - 12.154.12. Notices
  - 12.154.13. Section and Determinations
  - 12.154.14. Notices of Planning Requirements
- 12.155. System shall provide ability to incorporate information into documents prepared using standard templates including, but not limited to:
  - 12.155.1. Selected GIS maps
  - 12.155.2. Parcel data
  - 12.155.3. Actions taken
  - 12.155.4. Comments
  - 12.155.5. Photographs and graphical images
  - 12.155.6. City Code or other document text
  - 12.155.7. Name of person(s) who prepared the Staff Report
- 12.156. System shall provide ability to link a Facilities Agreement, Environmental Impact Report, Traffic Impact Analysis, or other study with an application, case and/or project.
- 12.157. System shall provide ability to generate appropriate notice based upon status code (e.g., Incomplete, Complete, Approved, or Denied).

- 12.158. System shall provide ability to produce letters from templates developed for each case type including, but not limited to, the following information as appropriate to each case:
  - 12.158.1. Letter preparation date and preparer
  - 12.158.2. Standard text, with editing capability
  - 12.158.3. Plan revision requirements
  - 12.158.4. Materials required
  - 12.158.5. Steps to be completed
  - 12.158.6. Reviews required
  - 12.158.7. Fees required
  - 12.158.8. Reports required
  - 12.158.9. Additional permits required
  - 12.158.10. Conditions of approval
  - 12.158.11. Attached graphical image
  - 12.158.12. Final Completeness comments (only the last and final comments should be available for import).
  - 12.158.13. Next steps
  - 12.158.14. Due date for required materials or actions.
- 12.159. System shall provide ability to distribute appropriate documents to the applicant, including:
  - 12.159.1. Printing associated documents or graphic maps, photos or drawings, laser, thermal, pdf, or cloud
  - 12.159.2. Addressing envelopes for mailing (either directly on the envelopes or on address labels)
  - 12.159.3. E-mailing or faxing notices and attachments, if previously requested
  - 12.159.4. Securing access for the applicant to review supporting information through the City's web site
  - 12.159.5. Providing access to copies of all issued letters upon demand
- 12.160. Ability to Create GIS maps that display queried data with ability to Email map as a .pdf attachment.
- 12.161. Ability to create mail merge notifications from a map service.

### **13. Testing**

- 13.1. The approved vendor shall provide a test plan, test cases, and test scripts that specify inputs (sequence of steps) and their expected outcome.
- 13.2. Conduct unit testing to ensure that components are functioning to the requirements specified in this Statement of Work and any Change Orders approved by the City.
- 13.3. Conduct integration testing to ensure that each interface is exchanging data and performing to the City's requirements.
- 13.4. Conduct system testing to ensure that the completely integrated system, with components and integrations, is working to City expectations without destroying or corrupting the operating environment (i.e. does not consume or lock up shared memory/resources).
- 13.5. Conduct acceptance testing. Provide a mechanism where clients can run automated User Interface (UI) Testing from a client machine on demand. Secure customer acceptance before submitting the change

request to the City's Change Control Board and deploying the system to the production environment.

- 13.6. Provide the ability for City administrators to perform full, automated regression testing (on server side) to identify and resolve any defects that may occur from upgrades and code changes.
- 13.7. Provide a separate database table that captures testing case history, the actual outcome, who conducted the test, what system configuration was used to generate the results, and the disposition on resolution and acceptance.

#### **14. Training & Documentation (user & administrator manuals/help files)**

- 14.1. The approved vendor shall provide end user, administrator, help desk, and train-the-trainer training with associated procedural manuals tailored to the City's workflow and configuration.
- 14.2. Training shall occur after testing acceptance and before deployment of the system into the production environment.
- 14.3. System shall provide a help section, leveraging modern technologies such as tutorial balloons (speech bubbles) or video instruction, to provide online tutorial assistance to users in describing the tasks or functions that a selected field performs.
- 14.4. System shall provide customizable online documentation and training materials for technical and functional queries, with context-specific help, search capability, and permitting-specific business process documentation.
- 14.5. System shall provide on-line, interactive help with support for hyperlink technology and industry standard formats (e.g., HTML file formats).

#### **15. Deployment (Go Live)**

- 15.1. The approved vendor shall provide a deployment plan that identifies the sequence of steps required for cutting over from the existing system to the new system in the production environment, who is responsible for each step, and what resources are required. The deployment plan shall identify risks and constraints and be accompanied by a contingency rollback plan should problems arise.
- 15.2. Deployment shall occur during non-operational hours with zero impact to operations.
- 15.3. The City's Change Control Board must approve the deployment plan before deployment can commence.

#### **16. Maintenance & Support**

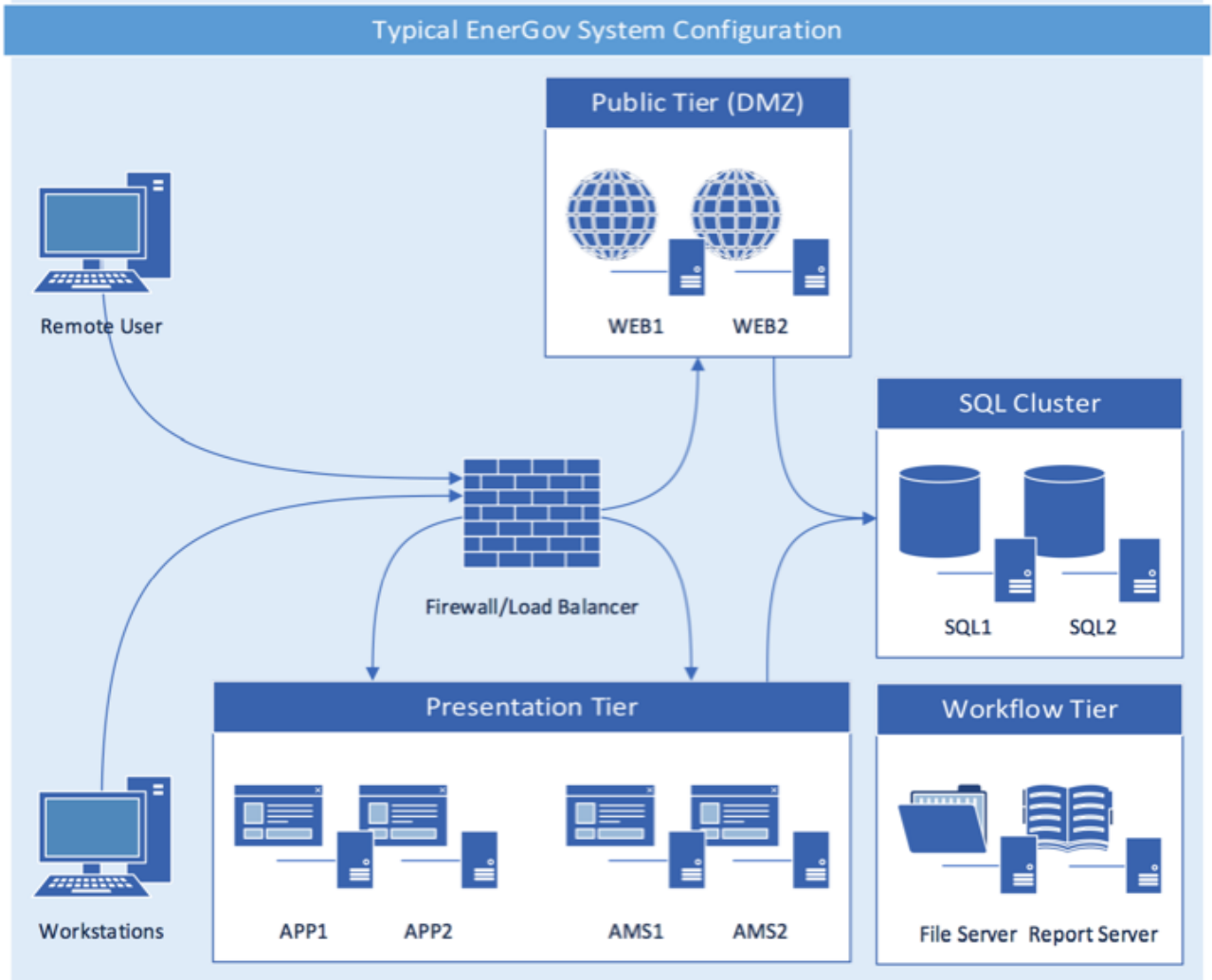
- ~~16.1. Vendor shall specify the levels of support that are available (i.e. platinum, gold, silver, bronze, etc.) with associated features and pricing.~~
- 16.2. At a minimum, the City requires Tier/Level 1, 2 and 3 support during their hours of operation 6:00am-6:00pm Central Daylight Time (CDT) Monday through Friday. The City expects that 70-80% of issues will be handled and resolved by Tier/Level 1 support without escalation.
- 16.3. If the City hosts the solution, the approved vendor shall provide remote access support with a secure VPN conferencing client.
- 16.4. The City shall have instant access to their data twenty-four hours per day, seven days per week, and three hundred and sixty-five days per year (24x7x365).

- 16.5. The approved vendor shall ensure their solution will function with Arc GIS Server in a production environment within thirty (30) days of a new version of Arc GIS Server being made available.
- 16.6. Maintenance shall include product support, resolution of encountered issues, and all software patches, updates and upgrades at no additional cost to the City.
- 16.7. The approved vendor shall utilize or provide tools to administrators for monitoring, alerting and troubleshooting performance issues, bugs, etc.).

## ESTIMATED BENEFIT AND COST OF OPERATIONS

ITEM	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	TOTAL	TOTAL NR	TOTAL AVG(AR)	PROJECT NUM	ACCOUNT
BENEFIT	2015	2016	2017	2018	2019	2020		TOTAL NRR	TOTAL ARR		
AEG %	0%	3.50%	6.10%	7%	7%	7%					
Anticipated Efficiency Gain (7,500 - 15,000 hrs per year @ average rate \$45/hr)	\$ -	\$ 337,500.00	\$ 585,000.00	\$ 675,000.00	\$ 675,000.00	\$ 675,000.00	\$ 2,947,500.00		\$ 491,250.00		
Reduced Errors - Rework (160 to 750 hrs @ \$45/hr)		\$ 7,200.00	\$ 14,400.00	\$ 28,800.00	\$ 33,750.00	\$ 33,750.00	\$ 117,900.00		\$ 23,580.00		
Increased Goodwill											
Hardware Refresh Savings	\$ 28,246.30		\$ 28,246.00			\$ 28,246.00	\$ 84,738.30	\$ 28,246.30	\$ 14,123.00		
<b>TOTAL BENEFITS</b>	<b>\$ 28,246.30</b>	<b>\$ 344,700.00</b>	<b>\$ 627,646.00</b>	<b>\$ 703,800.00</b>	<b>\$ 708,750.00</b>	<b>\$ 736,996.00</b>	<b>\$ 3,150,138.30</b>	<b>\$ 28,246.30</b>	<b>\$ 528,953.00</b>		
<b>COST</b>								<b>TOTAL NRC</b>	<b>TOTAL AVG(ARC)</b>		
Tyler Technologies Energov Software	\$ 440,214.00						\$ 440,214.00	\$ 440,214.00		IT1006	031-2119-416-9230
Tyler Technologies Energov Annual Maintenance (5% Inc w/o PP)	\$ 48,327.00	\$ 48,327.00	\$ 101,486.70	\$ 106,561.04	\$ 111,889.09	\$ 117,483.54	\$ 534,074.36		\$ 89,012.39	IT1006	031-2119-416-9230
Tyler U (5% w/o PP)	\$ 3,383.00	\$ 3,552.15	\$ 3,729.76	\$ 3,916.25	\$ 4,112.06	\$ 4,317.66	\$ 23,010.87	\$ 3,383.00	\$ 3,925.57	IT1006	031-2119-416-9230
Tyler Technologies Professional Services (Service 5% w/o PP)	\$ 709,779.00	\$ 6,879.00	\$ 14,445.90	\$ 15,168.20	\$ 15,926.60	\$ 16,722.93	\$ 778,921.63	\$ 709,779.00	\$ 13,828.53	IT1006	031-2119-416-9230
Records Management Solution (@Estimated 20% maint) (Dec 16th Agenda - Laserfiche)	\$ 150,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 300,000.00	\$ 150,000.00	\$ 30,000.00	IT1006	031-2119-416-9230
Tyler Technologies Travel (Estimated)	\$ 64,600.00						\$ 64,600.00		\$ 64,600.00	IT1006	031-2119-416-9230
<b>Total Tyler Technologies</b>	<b>\$ 1,416,303.00</b>	<b>\$ 88,758.15</b>	<b>\$ 149,662.36</b>	<b>\$ 155,645.48</b>	<b>\$ 161,927.75</b>	<b>\$ 168,524.14</b>	<b>\$ 2,140,820.87</b>	<b>\$ 1,367,976.00</b>	<b>\$ 136,766.49</b>		
Bluebeam (70 Licences * \$29.00 Volume)	\$ 17,600.00	\$ 2,030.00	\$ 2,030.00	\$ 2,030.00	\$ 2,030.00	\$ 2,030.00	\$ 27,750.00	\$ 17,600.00	\$ 2,030.00	IT1006	031-2119-416-9230
iPad Keyboard (34)	\$ 11,500.00	\$ -	\$ 11,500.00	\$ -	\$ -	\$ 11,500.00	\$ 34,500.00	\$ 11,500.00	\$ 4,600.00	IT1006	031-2119-416-9230
iPad Case (34)	\$ 1,700.00	\$ -	\$ 1,900.00	\$ -	\$ -	\$ 2,100.00	\$ 5,700.00	\$ 1,700.00	\$ 800.00	IT1006	031-2119-416-9230
iPads (34)	\$ 18,500.00	\$ -	\$ 20,000.00	\$ -	\$ -	\$ 21,500.00	\$ 60,000.00	\$ 18,500.00	\$ 8,300.00	IT1006	031-2119-416-9230
Airwatch for iPads (34 New iPads)	\$ 1,122.00	\$ 225.00	\$ 225.00	\$ 225.00	\$ 225.00	\$ 225.00	\$ 2,247.00	\$ 1,122.00	\$ 225.00	IT1006	031-2119-416-9230
Verizon Service (34 New Services)	\$ 16,320.00	\$ 16,320.00	\$ 17,000.00	\$ 17,000.00	\$ 17,000.00	\$ 17,000.00	\$ 100,640.00	\$ 16,320.00	\$ 16,864.00	IT1006	031-2119-416-9230
42" Touch Screen (5 @ \$1755 + 29.92/4 Years) * Need More Reseach on Usage	\$ 9,000.00	\$ -	\$ -	\$ 9,500.00	\$ -	\$ -	\$ 18,500.00	\$ 9,000.00	\$ 1,900.00	IT1006	031-2119-416-9230
27" Touch Screen (50 @ \$608) * Need More Reseach on Usage	\$ 30,400.00	\$ -	\$ -	\$ 30,400.00	\$ -	\$ -	\$ 60,800.00	\$ 30,400.00	\$ 6,080.00	IT1006	031-2119-416-9230
Mounting for 42" Touch Screens (5 @ \$3500 still reaseraching \$500 option)	\$ 17,500.00	\$ -	\$ 17,500.00	\$ -	\$ -	\$ -	\$ 35,000.00	\$ 17,500.00	\$ 3,500.00	IT1006	031-2119-416-9230
Printers (2 Zebra @ \$789)	\$ 1,578.00	\$ -	\$ 14,400.00	\$ -	\$ -	\$ 16,000.00	\$ 31,978.00	\$ 1,578.00	\$ 6,080.00	IT1006	031-2119-416-9230
Production (Storage from 001-9999-406-9230 @ 200k)											
Servers (20%)	\$ 40,000.00	\$ 8,000.00	\$ 8,400.00	\$ 8,820.00	\$ 9,261.00	\$ 9,724.05	\$ 84,205.05	\$ 40,000.00	\$ 8,841.01		031-2119-416-9230
Load Balancers (20%)	\$ 30,000.00	\$ 6,000.00	\$ 6,300.00	\$ 6,615.00	\$ 6,945.75	\$ 7,293.04	\$ 63,153.79	\$ 30,000.00	\$ 6,630.76		001-9999-406-9230
Storage (20%)	\$ 100,000.00	\$ 20,000.00	\$ 21,000.00	\$ 22,050.00	\$ 23,152.50	\$ 24,310.13	\$ 210,512.63	\$ 100,000.00	\$ 22,102.53		001-9999-406-9230
Bandwidth (20%)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		001-9999-406-9230
Backup Media (20%)	\$ 30,000.00	\$ 6,000.00	\$ 6,300.00	\$ 6,615.00	\$ 6,945.75	\$ 7,293.04	\$ 63,153.79	\$ 30,000.00	\$ 6,630.76		001-9999-406-9230
Test Dev (Cloud)											
Servers	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 120,000.00		\$ 20,000.00	IT1006	001-9999-406-9230
Load Balancers											
Storage											
Bandwidth											
Backup Media											
Professional Services - Project Management (PROJECTESS) (160k from 001-2119-413-8516 @160k)	\$ 160,000.00						\$ 160,000.00	\$ 160,000.00			001-2119-413-8516
Contingency	\$ 100,000.00						\$ 100,000.00	\$ 100,000.00		IT1006	001-9999-406-9230
<b>Total Other Costs</b>	<b>\$ 605,220.00</b>	<b>\$ 78,575.00</b>	<b>\$ 146,555.00</b>	<b>\$ 123,255.00</b>	<b>\$ 85,560.00</b>	<b>\$ 138,975.25</b>	<b>\$ 1,178,140.25</b>	<b>\$ 585,220.00</b>	<b>\$ 114,584.05</b>		
<b>TOTAL COSTS</b>	<b>\$ 2,021,523.00</b>	<b>\$ 167,333.15</b>	<b>\$ 296,217.36</b>	<b>\$ 278,900.48</b>	<b>\$ 247,487.75</b>	<b>\$ 307,499.39</b>	<b>\$ 3,318,961.12</b>	<b>\$ 1,953,196.00</b>	<b>\$ 251,350.54</b>		
<b>5 Year Total Cost of Ownership (TCO)</b>	<b>\$ 3,318,961.12</b>										

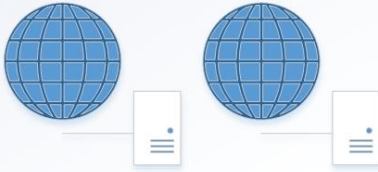
## DIAGRAMS/DESIGNS



## Production Environment

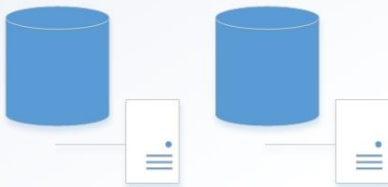
### Web Servers (WS)

(1 required, +1 for HA)



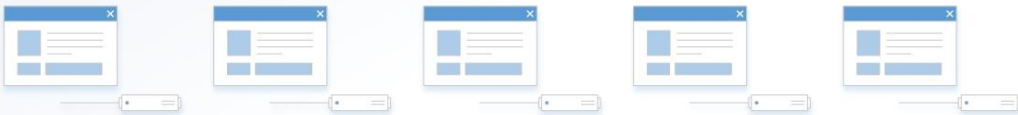
### Database Servers (DS)

(1 required, +1 for HA)



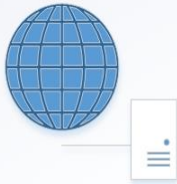
### Application Servers

(30 connections per server, +1 for HA)



## Training Environment

### Web Servers (WS)



### Database Servers (DS)



### Application Servers

(30 connections per server)





## Staging Environment

### Web Servers (WS)



### Database Servers (DS)



### Application Servers

(30 connections per server)



## Development Environment

### Web Servers (WS)

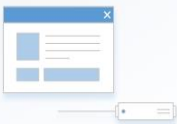


### Database Servers (DS)

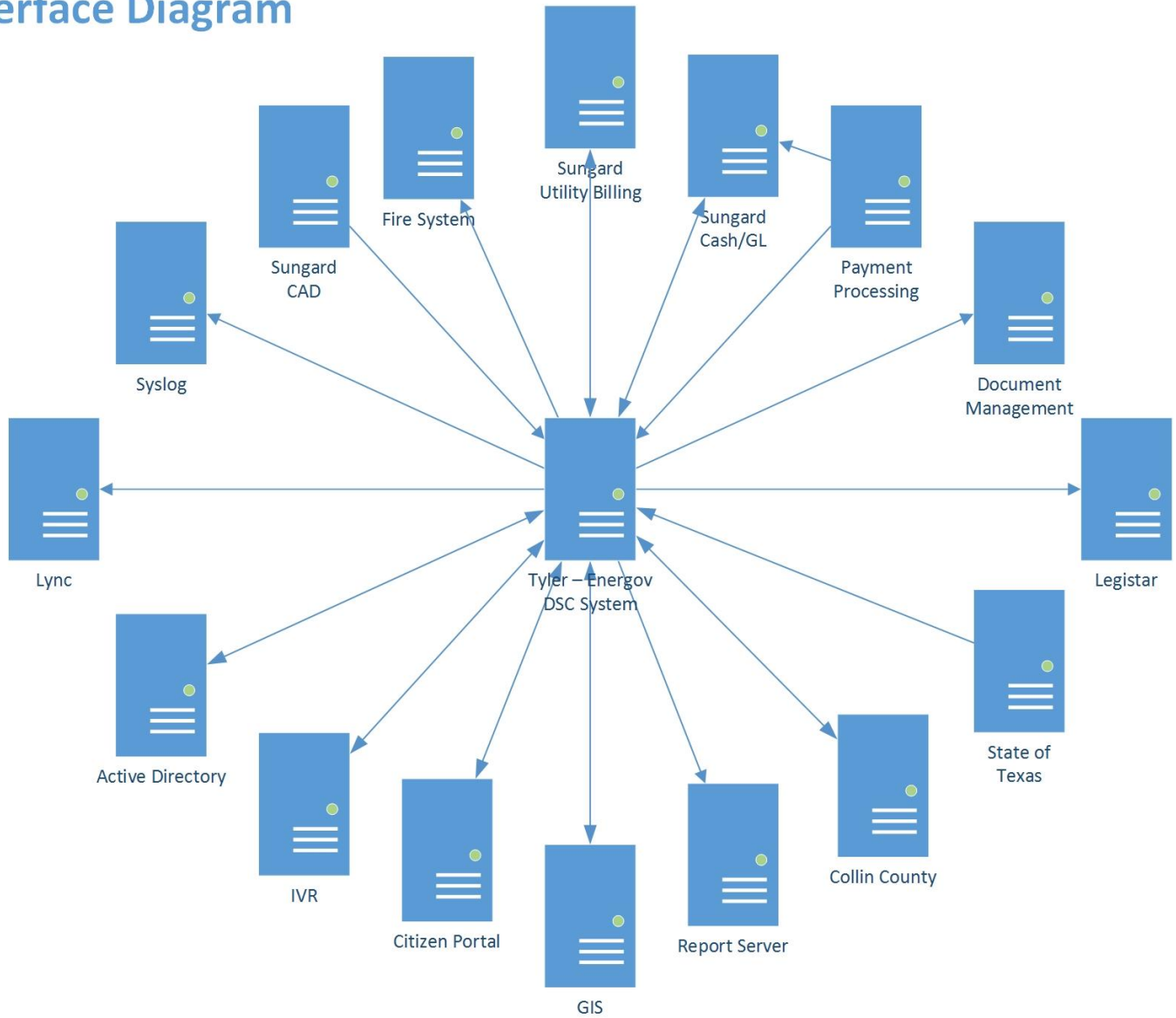


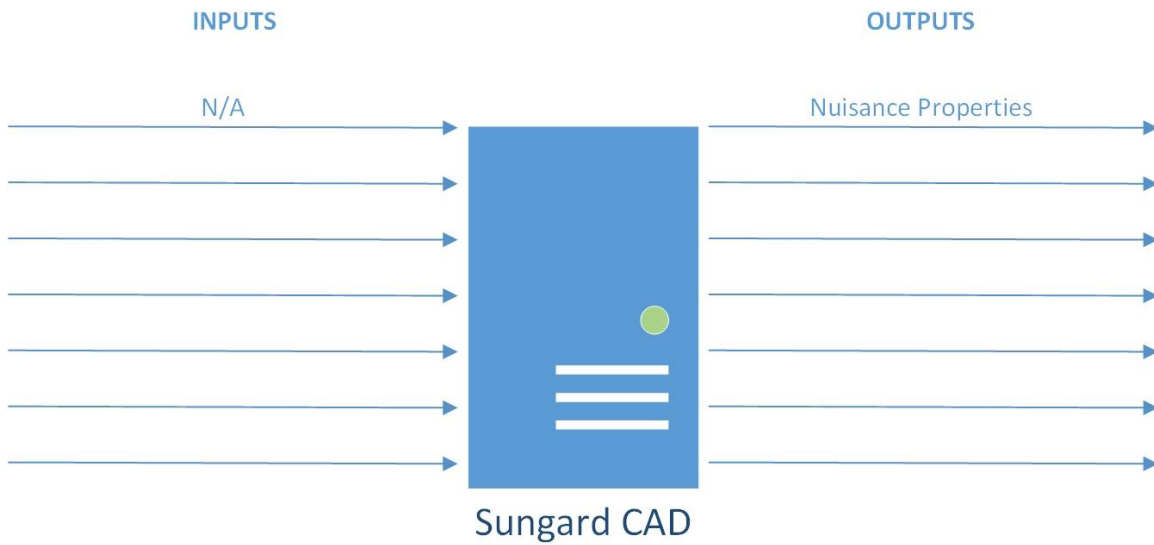
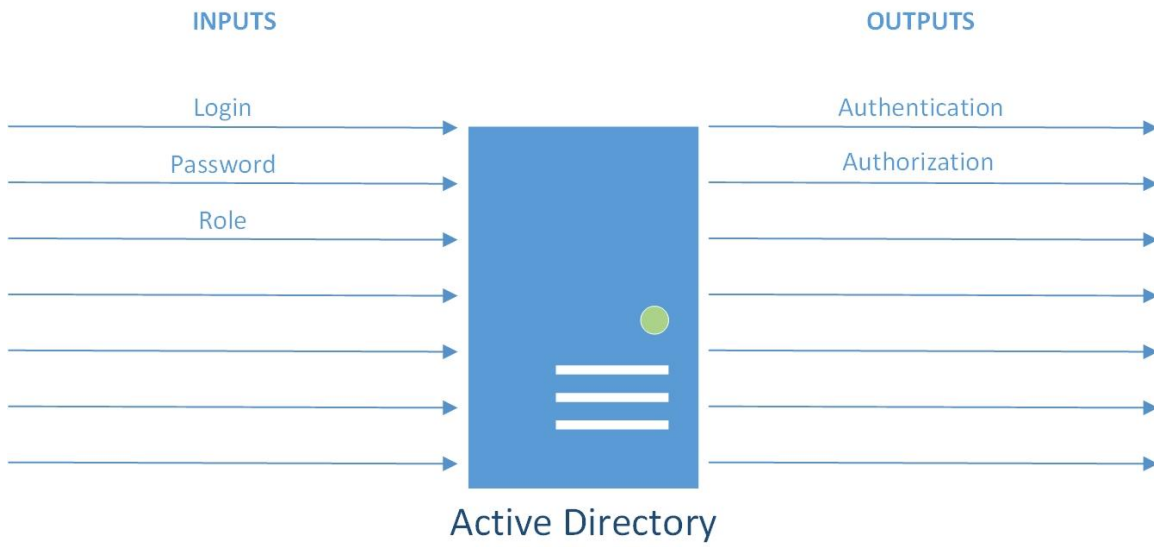
### Application Servers

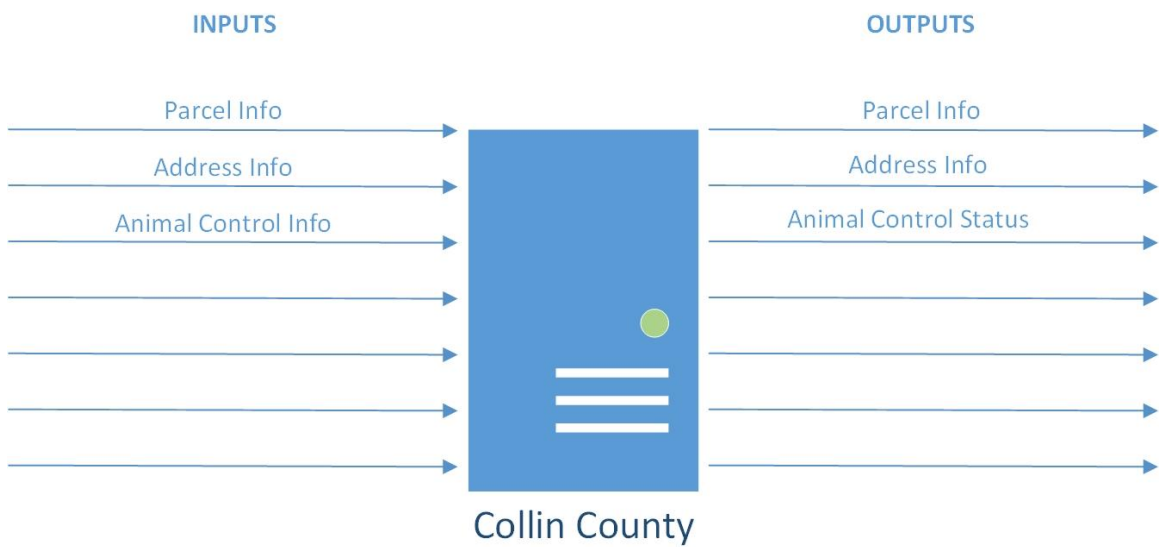
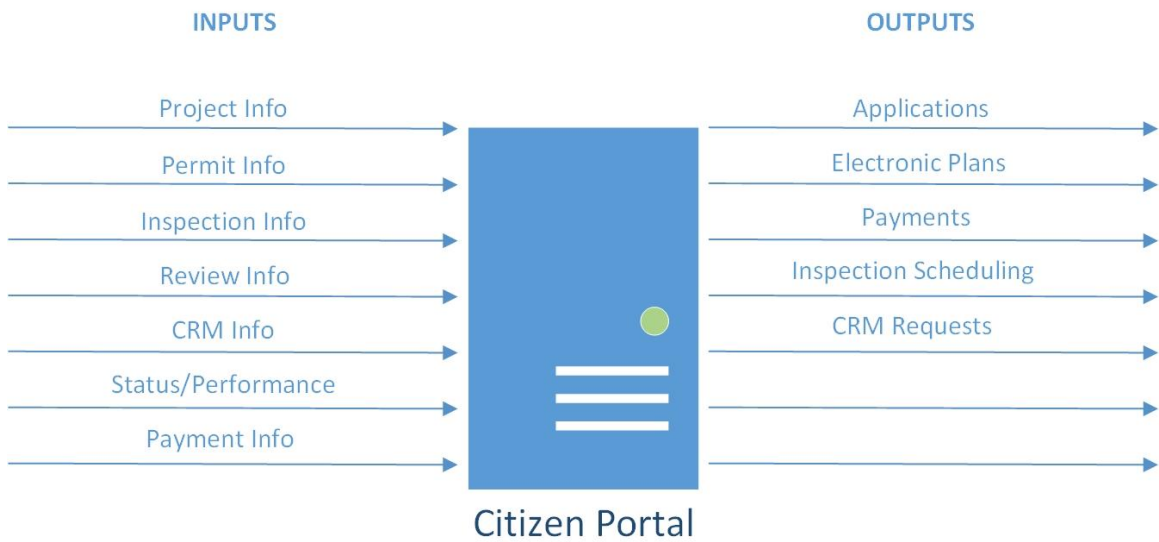
(30 connections per server)

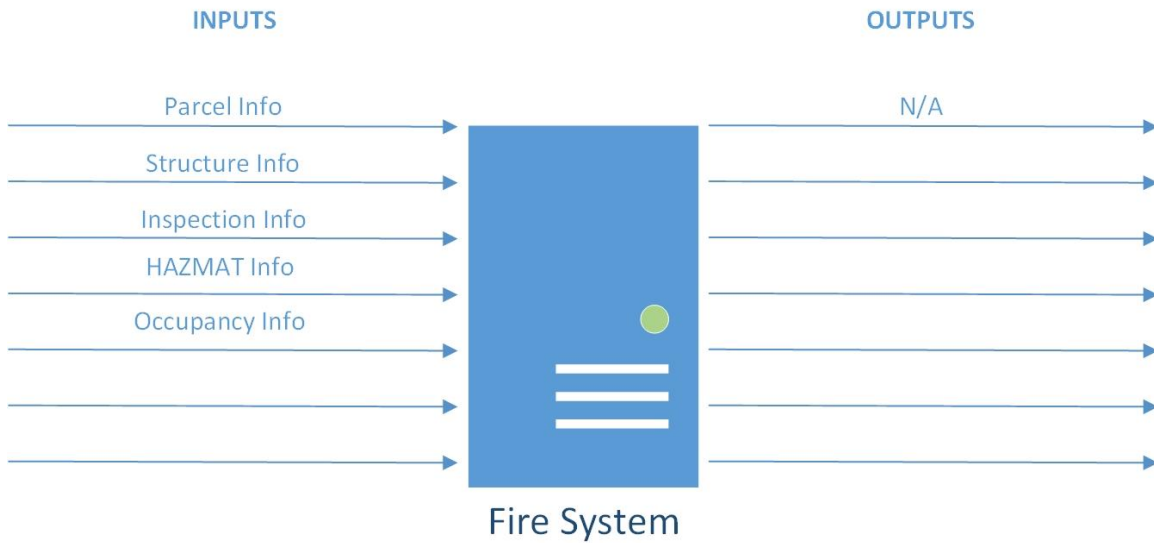
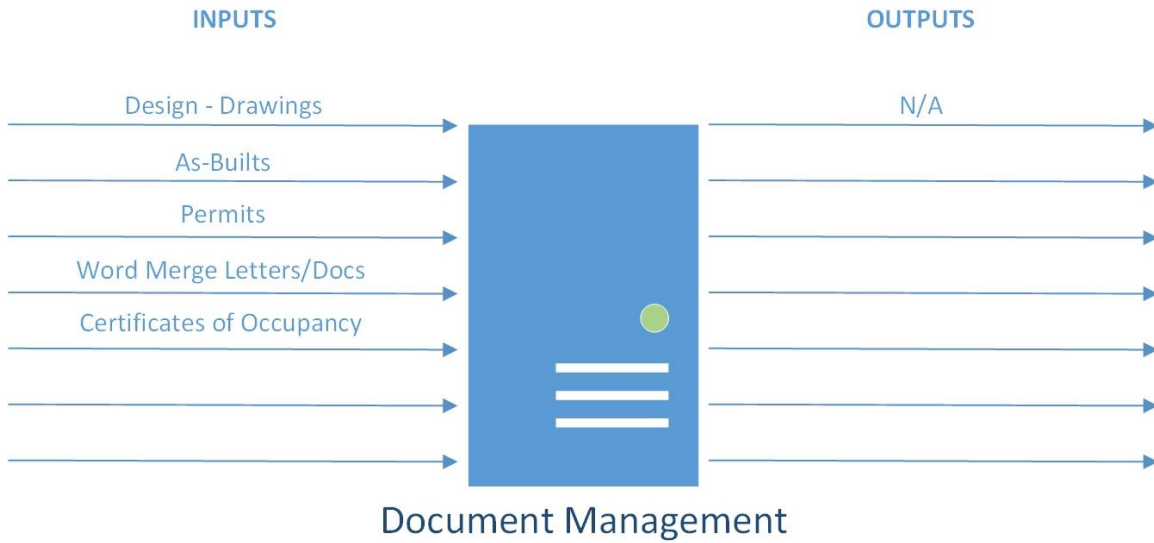


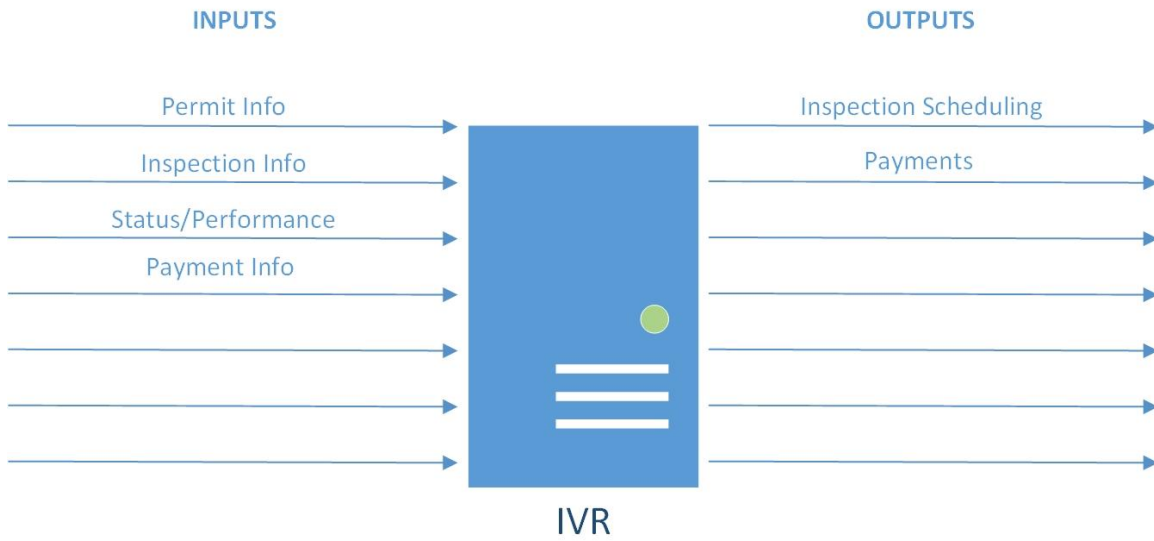
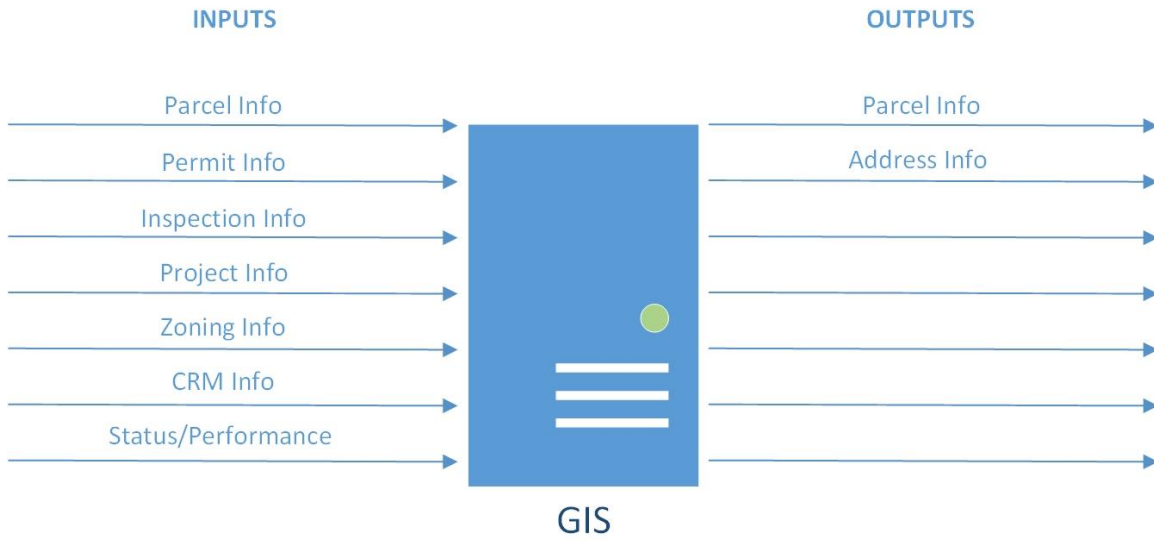
# DSC System Interface Diagram

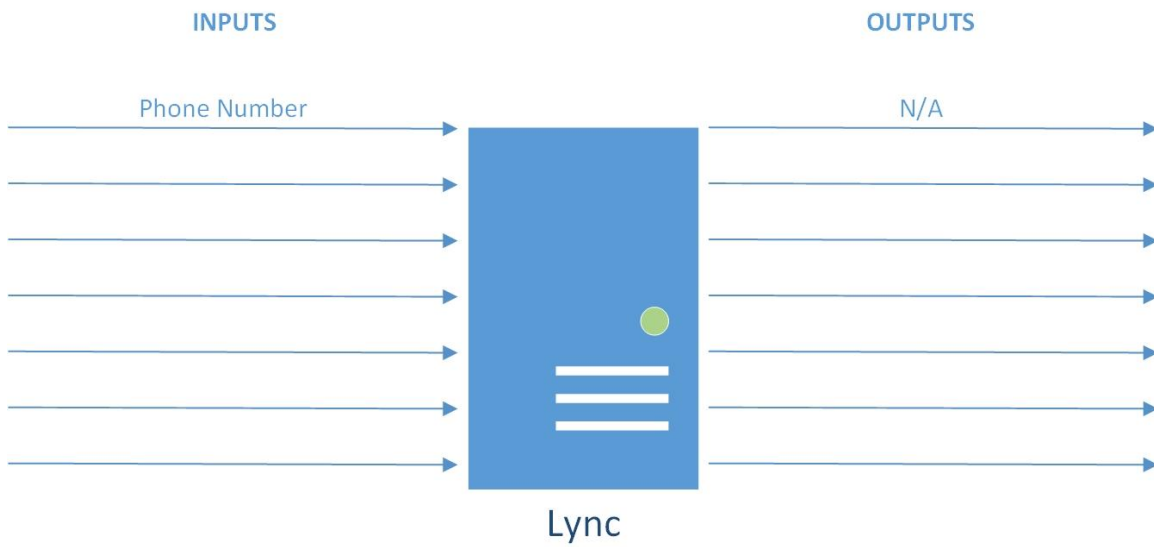
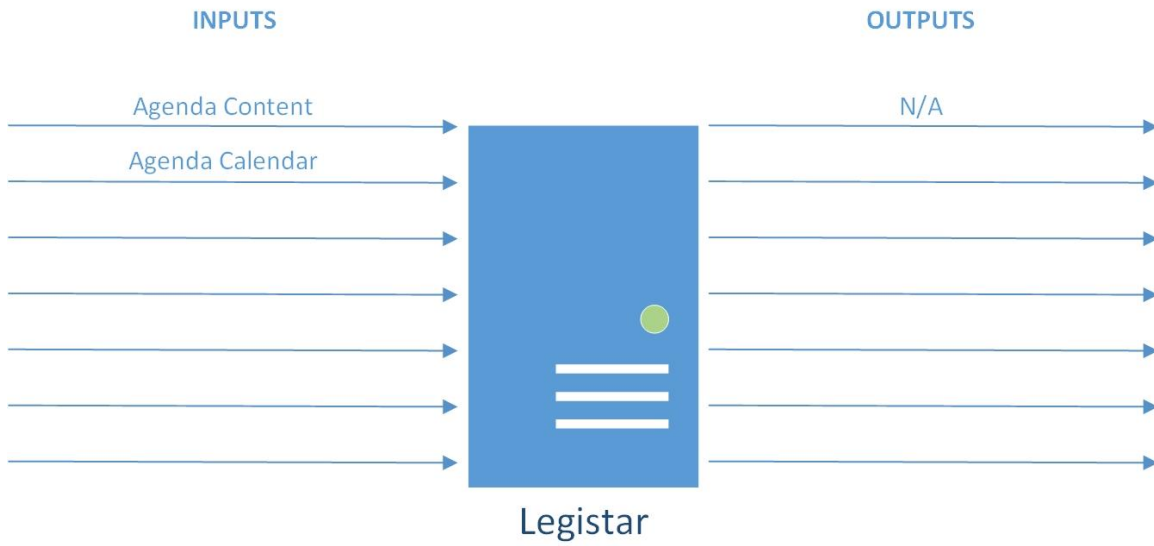




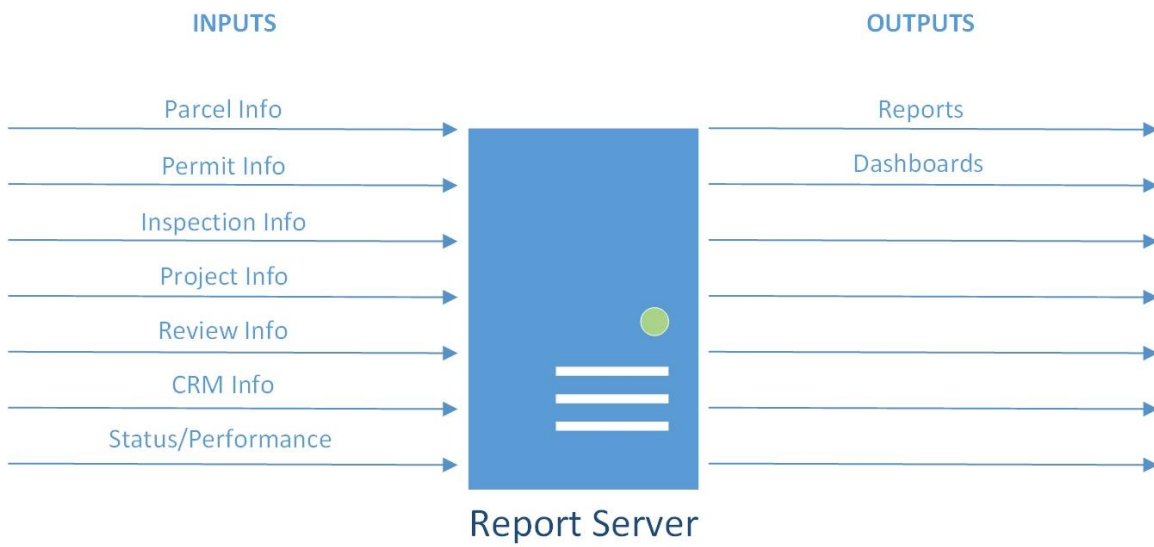
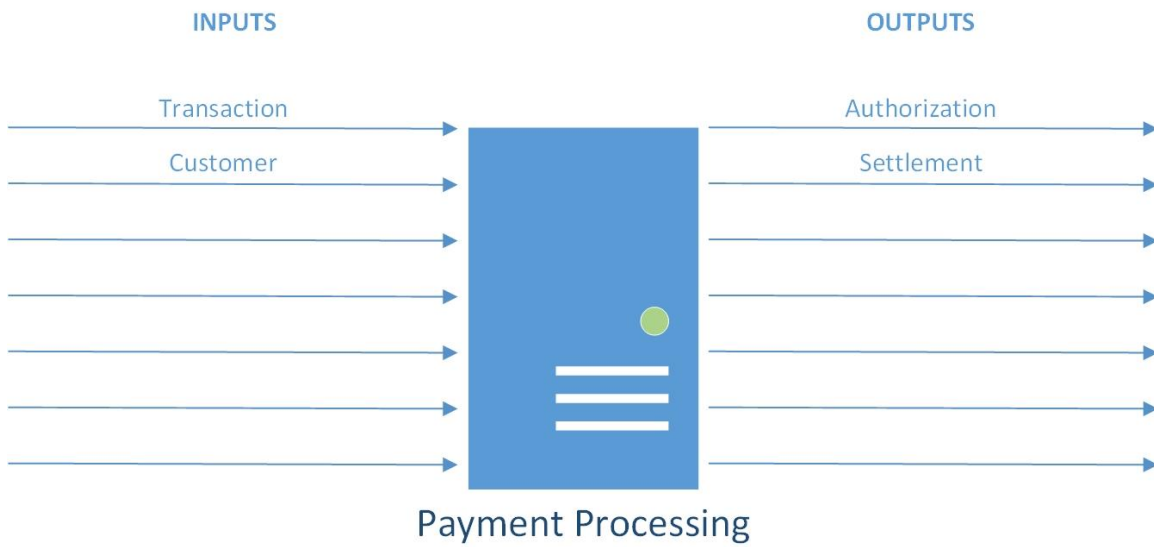


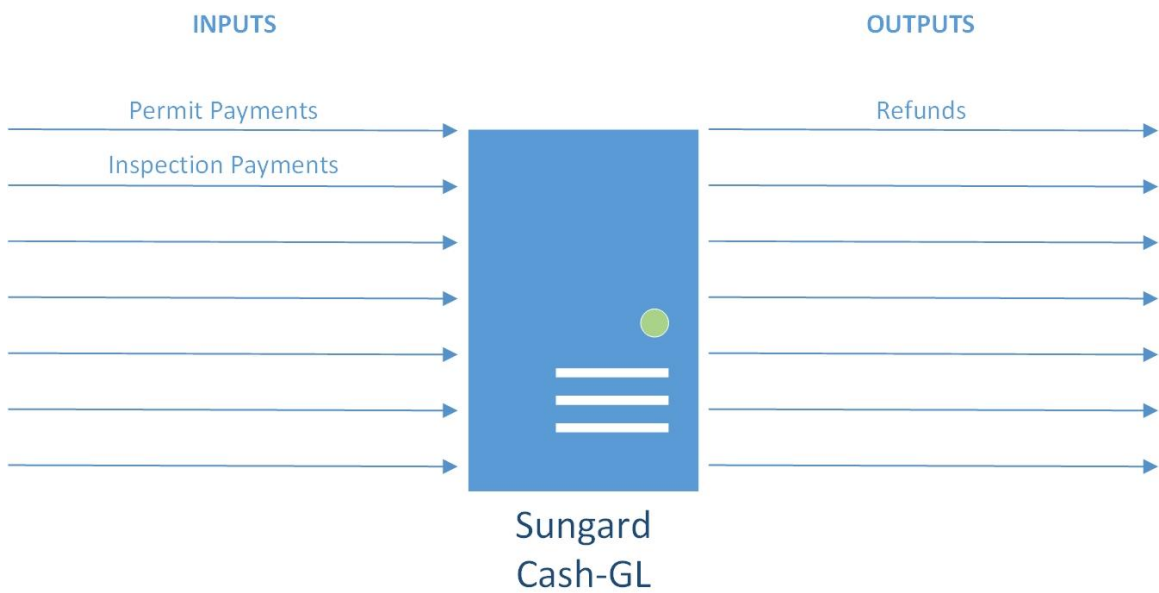
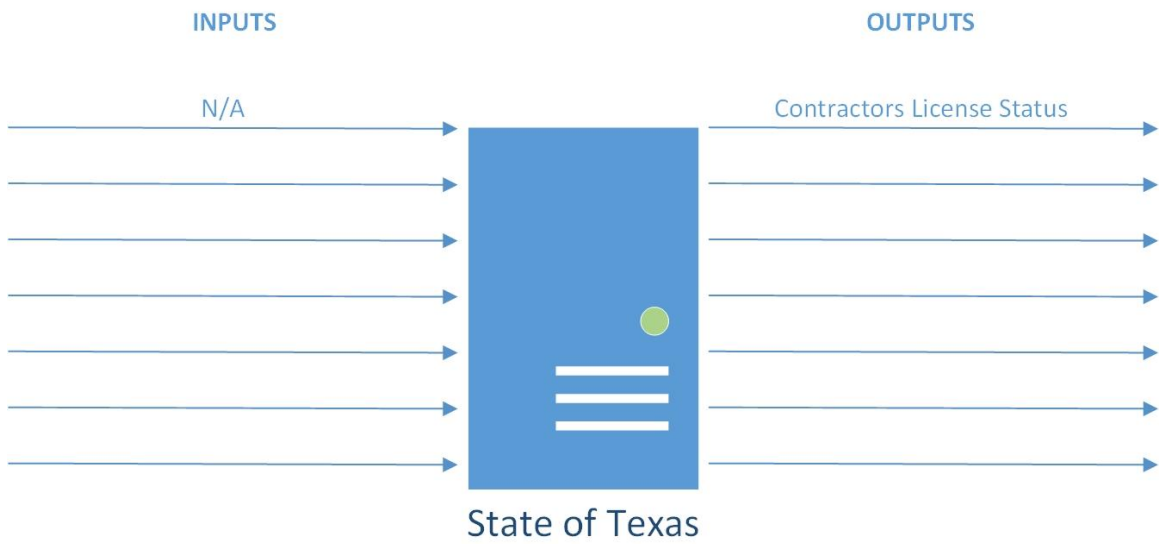


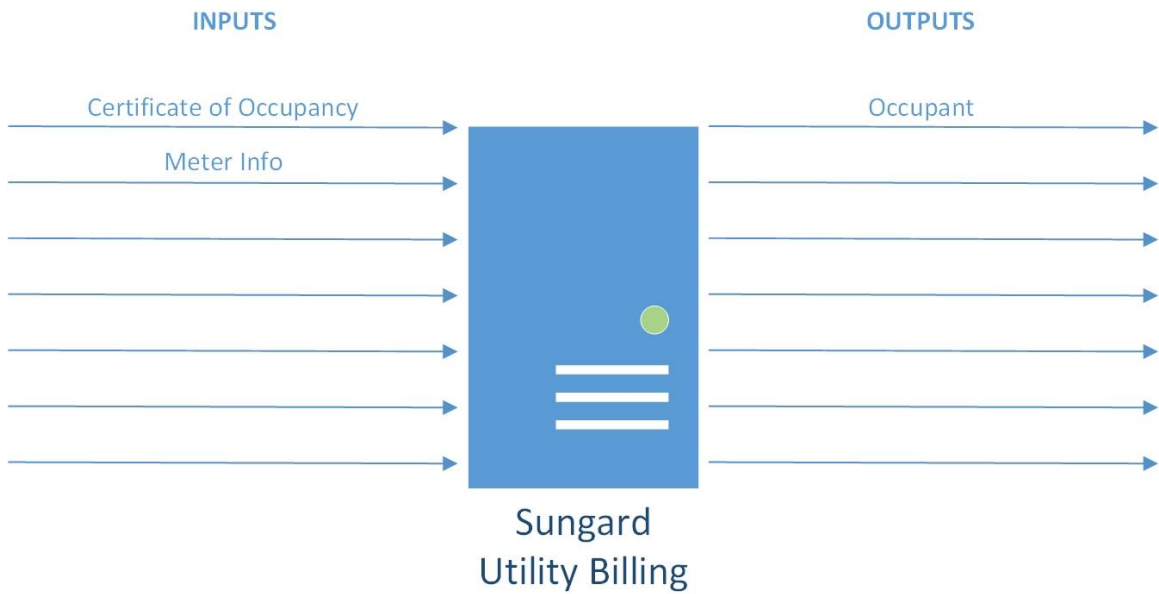
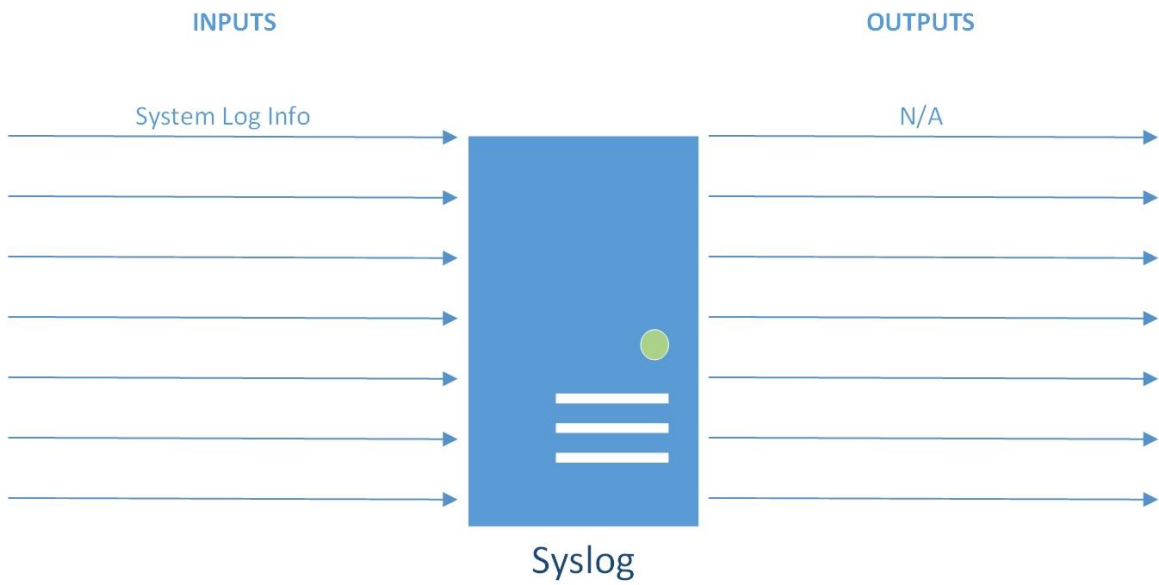














## CONTRACTS

---

### TYLER TECHNOLOGIES CONTRACT

## BANKCARD SERVICES WORLDWIDE (BCSW) MERCHANT AGREEMENT

---

### SUMMARY

#### Online Payments (MyGovPay)

- **Interchange, Dues & Assessments @ Pass-Thru**
  - These are the direct costs from Visa/MasterCard/Discover
- **BCSW Fee – 0.14% Per Transaction**
- **Authorization Fee - \$0.10 Per Transaction**

#### EnerGov’s MyGovPay (Online / Card-Not-Present Payments)\*\*

	MyGovPay (Online Payments)	MyGovPay (Online Payments)
	Percentage Based Fee	+ Transaction Fee
<b>Option 1 – Government Entity Paid</b>	- 0.14% - Interchange, Dues & Assessments @ Pass-Thru	<b>\$0.10</b>
<b>Option 2 – Patron Paid</b>	<b>N/A</b>	<b>N/A</b>

#### EnerGov’s Virtual Pay (Retail Card Present)

	MyGovPay (Online Payments)	MyGovPay (Online Payments)
	Percentage Based Fee	+ Transaction Fee
<b>Option 1 – Government Entity Paid</b>	- 0.14% - Interchange, Dues & Assessments @ Pass-Thru	<b>\$0.10</b>
<b>Option 2 – Patron Paid</b>	<b>N/A</b>	<b>N/A</b>

## SIGNATURE PAGE

---

By signature below, each signor commits to the objectives of this project and providing the resources necessary to ensure the scope of this plan can be delivered within the time and budget constraints outlined. Any deviations from this plan shall follow City change control procedures.

City Manager	Date
Deputy City Manager	Date
Deputy City Manager	Date
Executive Director of Development Services	Date
CIO	Date
Project Manager	Date

