



**City of Tampa – Construction Services Division
Key Performance Indicators & Change Management
Final Report
August 19, 2009**

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Section 1

Project Overview

Project Overview

KPMG LLP (KPMG) was engaged by the City of Tampa Construction Services Division (CSD) to provide change management support including identifying key performance indicators (KPIs) for the Division. Project activities included the following:

- Assisting CSD personnel with an overview of KPIs and performance frameworks and how KPIs are aligned to the CSD business strategy
- Providing change management advisory services
- Gathering data from
 - Key stakeholder groups
 - Existing records
 - Industry leading practices
 - Other municipalities
- Analyzing information collected at stakeholder interviews and analysis of CSD historical plan review information
- Preparing recommended KPIs and process improvements
- Assisting CSD identify next steps

Section 2

Performance Framework and KPIs

Performance Framework



KPMG assisted CSD with an overview of Performance Management Frameworks and how CSD can implement KPIs that align with CSD’s business strategy.

Linking Vision to KPIs

Vision

CSD's "Vision" is to be a team of dedicated professionals working for the benefit of our community in a state-of-the-art environment, and to be universally recognized as a leader in our industry."

Business Strategy

CSD's "Mission" is to provide the highest level of professional services to establish and promote a safe built-environment for the protection, enhancement, and livability of our community."

Critical Success Factors

One CSF is the timely and predicable cycle time for Residential New Construction plan review.

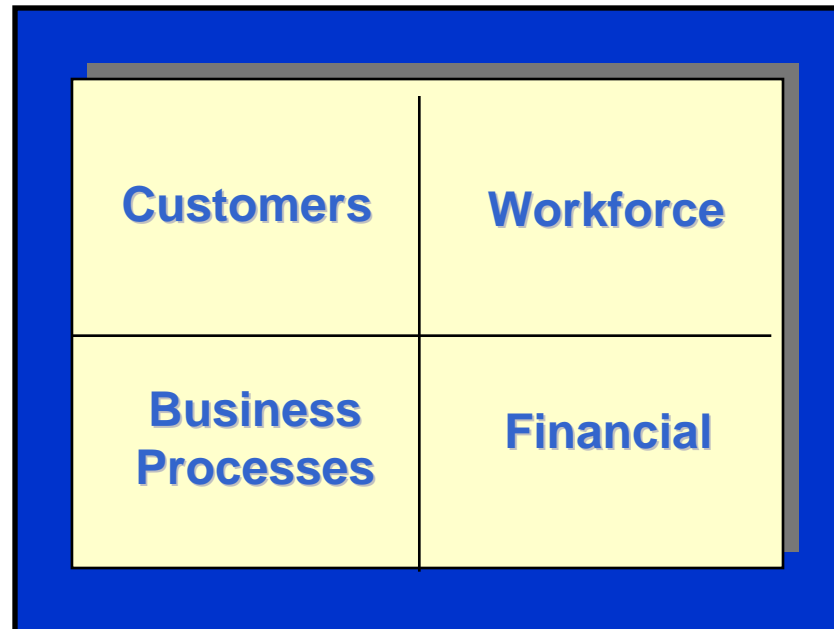
Key Performance Indicator

The KPI for the timely and predictable CSF is for CSD to complete the first residential new construction plan review within 3 – 5 working days of submittal

KPI Framework – Balanced Scorecard

The Balanced Scorecard is a framework for establishing KPIs for Customers, Workforce, Business Processes and Financial. Financial conditions, such as the changing demand for CSD services, drive an organization to effect change.

The CSD baseline KPIs were developed for the Balanced Scorecard Customer and Workforce perspectives. CSD is a fee-based service and financial considerations will help drive process improvements outlined in “Next Steps.”



KPI Considerations

KPIs should be S.M.A.R.T.

- | | |
|--------------------|------------------------------------------------------------------------------------------------|
| S pecific | CSD management, staff and other City departments understand and concur with the KPI |
| M easurable | CSD can quantify the KPI |
| A ctionable | CSD can take direct action to impact the KPI and can adjust the KPI as the marketplace changes |
| R ealistic | CSD must stretch to attain the goal yet may achieve the KPI with reasonable efforts |
| T imely | CSD must measure the KPI over a timeframe |
- CSD should establish baseline SMART KPIs that enable CSD to link the performance measurement of its operations to its business strategy

CSD Baseline KPI Considerations

KPIs should consider the customer – The KPIs provide measure of how customers view the organization. Customer expectations may change with changing market conditions.

KPIs should consider the staff – The CSD’s ability to provide service is impacted by the staff training and the ability to respond to the customer’s needs.

KPIs should consider process and innovation– Improvements in processes may allow the CSD to reduce service cycle time and identify opportunities to improve quality.

KPIs should consider finances– Financial considerations for cost recovery and inter-agency agreements are reflected in “Next Steps.”

The CSD should assess the marketplace and monitor the need to update the KPIs.

CSD Change Management

1. Change Management Planning

- Identifying the causes for the need for change and define the desired outcomes
- Identifying the inter-departmental support CSD needs to be successful
- Consulting City senior management
- Developing communications with a consistent theme to employees, customers, citizens and the media

2. Training

- CSD should implement a formal training program to transition employees into new functions
- CSD management needs the support of mid-level supervisors to help deliver a consistent message to employees

3. Reporting

- CSD should establish a monitoring program to evaluate the personnel changes and make adjustments to meet CSD business needs.

Section 3

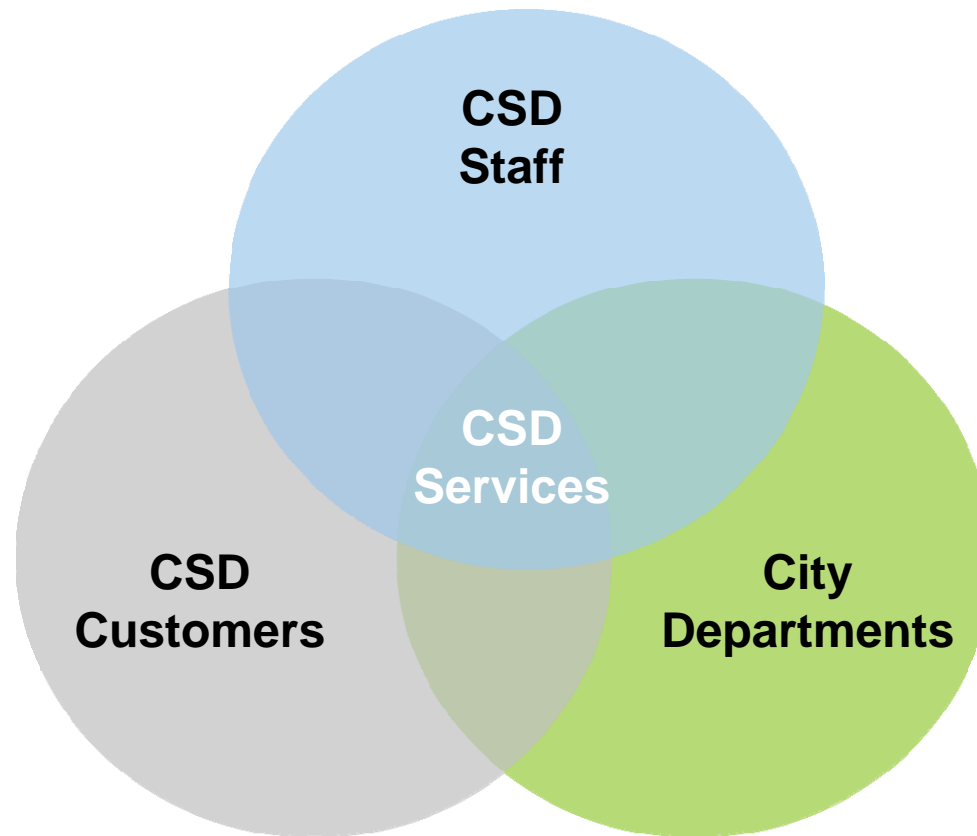
Gathering and Analyzing Information

Data Gathering – Key Stakeholders



Data gathering efforts included soliciting feedback from key stakeholders, analysis of CSD historical data from the plan review log and comparing CSD activities to industry leading practices and other municipalities.

Data Gathering – Key Stakeholder Groups



The CSD Stakeholders are associated with one of three stakeholder groups that overlap for providing plan review, permitting and inspection services.

CSD Customers Defined

Construction Services Advisory Council

- Developers, general contractors, homebuilders, design professionals and attorneys
- Large-scale commercial projects, single and multi-unit residential projects
- Project owners and the owners' representatives

Association Representatives

- Trade association members and sub-contractors (e.g. electrical, plumbing, HVAC, roofing, pools, etc.)
- Broad based, large-scale or small-scale project, residential or commercial
- Sub-contractors or contractors on small engagements

Customer Expectations

- CSD staff should be knowledgeable, communicate clearly and maintain a positive attitude
- Intake staff should check plans for completeness upon submittal
- CSD should provide expedited service options for professional contractors
- CSD should provide customers web-based plan review status
- CSD should document and report follow-up for reported unlicensed contracting
- Outreach and education related to technology training, process enhancements and informational communications

Customer Expectations

- Customers stated the importance of predictability and reliability with CSD's services including
 - Consistency of the timing of plans review
 - Consistent building code interpretation by plan reviewers and inspectors
- Customers stated the importance of CSD's responsiveness including
 - Timely processing of permit and plan intake at customer service
 - Accessibility to inspectors via cell phone
 - Phone calls to CSD should be returned timely
 - Mediation and resolution of "red-tagged" inspection items

CSD Employees Defined

1. Intake and Customer Service

- Welcome customers, answer basic questions and receive plans for review
- Route approved or disapproved plans to customers after review
- Issue permits and collect fees

2. Plan Review

- Review and approve building and site plan submissions for compliance with City and State code requirements

3. Inspections

- Inspect site and building construction projects for compliance with City and State code requirements and approved plans

CSD Employee Expectations

- Consistency and predictability of CSD services are important
- CSD Intake should complete plan submission checklists
- CSD personnel should present a professional and positive “can do” attitude
- CSD should provide a consistent interpretation of code by Client Facilitators, Plan Reviewers and Inspectors
- Employees requested technology enhancements to provide a more efficient plan and inspection permit system for customers and employees

CSD Employee Expectations

- CSD employees requested enhancements for communicating policy and process changes and employee training including:
 - Formal employee training program and communication of policy changes
 - Transitional training materials for both new employees and existing employees with changing responsibilities
 - Communicate process changes to customers
 - Web-based plan review tracking
- CSD employees noted the importance of being responsive to customer's special requests, including incorporating time for customer questions into inspectors' schedules

Other City Departments and Divisions

Two departments are included in the plan review process

- Fire
- Parks and Recreation

CSD consults with other departments and divisions as needed for plan review technical advice

- Land Development Coordination
- Historic Preservation and Urban Design
- Public Works, which includes Transportation
- Stormwater
- Water
- Wastewater
- Solid Waste

Other City Departments and Divisions Expectations

Other City departments and divisions stated CSD should assume more responsibility in two areas:

- CSD employees should be empowered to make decisions for common code questions consulting with other departments as needed
- CSD should have authority over the City construction code, including ultimate authority over plan submission and inspection compliance with code requirements

Other City departments and divisions stated CSD personnel should improve communication and knowledge including:

- Consistency of information provided by CSD staff
- CSD should clearly communicate plan review comments and provide completed checklists to other departments
- Technology enhancements for tracking permit and plan review status

Data Analysis

KPMG assisted CSD with an analysis of:

- Historical information from the CSD plan review log database
- Compiling and analyzing customer, workforce and City departments' and divisions' feedback
- Leading industry practices and performance measurements from other municipalities

CSD Plan Reviews – Historic

Category Name	Category	Average number of calendar days for Site Plan Review turnaround	Average number of calendar days for Building Plan Review turnaround	Average number of calendar days for Plan Approval	Count	Page
New Commercial	NC	7.5	2.1	110	259	25 - 26
New Residential	NR	1.7	1.8	28	461	27 - 28
Commercial Miscellaneous	S/B	5.2	1.1	58	255	29 - 30
Commercial Repair / Remodel	REP	0.8	1.0	9	79	31 - 32

N/A: Not Applicable

Source: CSD Plan Review Log. Data adjusted for outliers

The project team analyzed a selection of the Plan Review Log data. “Plan Review Turnaround” reflects the average number of days for CSD staff to complete each review. “Plan Approval” reflects total days required to approve the plans, which may include multiple submissions and time that plans are returned to the customer or otherwise not in CSD custody.

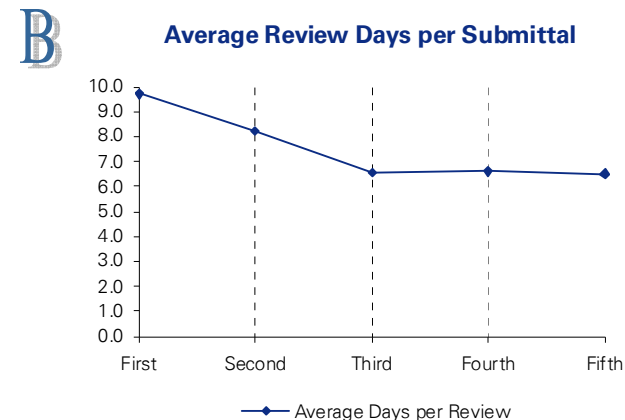
New Commercial – Site Review

Of the 259 new commercial plans selected, 152 were submitted for site review and the exhibits below reflect:

Graph A: 20% of plans approved on the first submission

35% average plan approval rate on the first three submittals

Graph B: Average plan review 7.5 calendar days per submittal



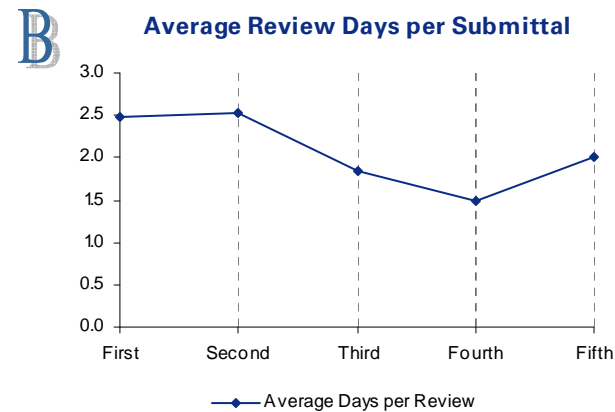
New Commercial – Building Review

Of the 259 new commercial plans selected, 256 were submitted for building review and the exhibits below reflect:

Graph A: 28% of plans approved on the first submission

47% average plan approval rate on the first three submittals

Graph B: Average plan review 2.1 calendar days per submittal



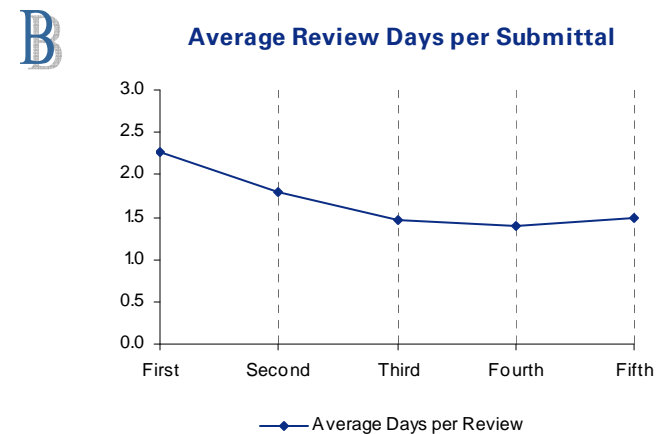
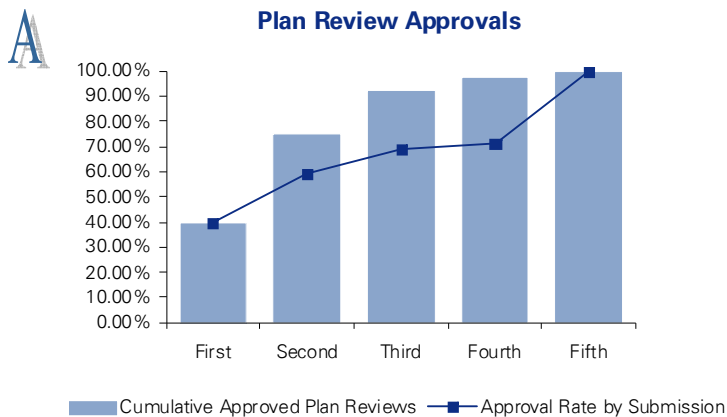
New Residential – Site Review

Of the 461 new residential plans selected, 460 were submitted for site review and the exhibits below reflect:

Graph A: 39% of plans approved on the first submission

56% average plan approval rate on the first three submittals

Graph B: Average plan review 1.7 calendar days per submittal



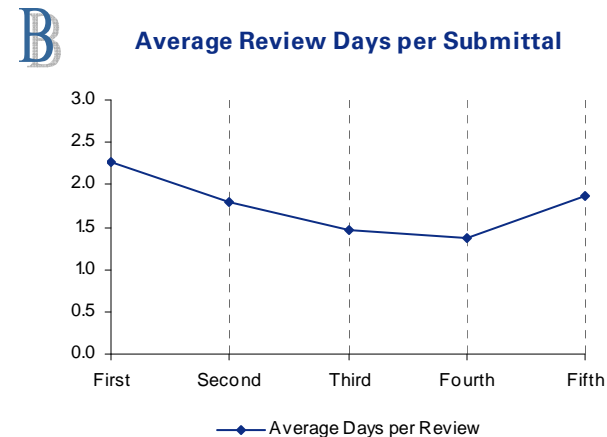
New Residential – Building Review

Of the 461 new residential plans selected, 459 were submitted for building review and the exhibits below reflect:

Graph A: 40% of plans approved on the first submission

57% average plan approval rate on the first three submittals

Graph B: Average plan review 1.8 calendar days per submittal



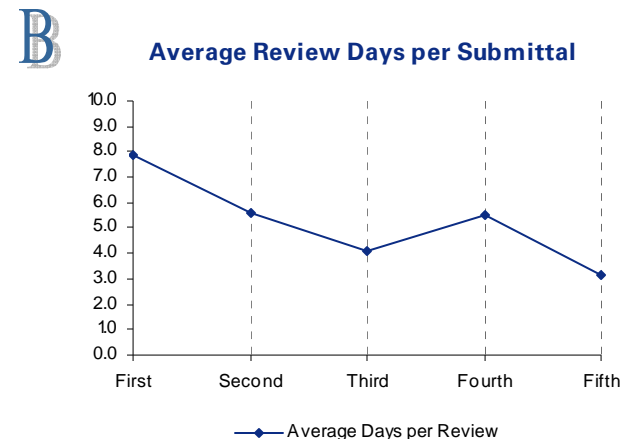
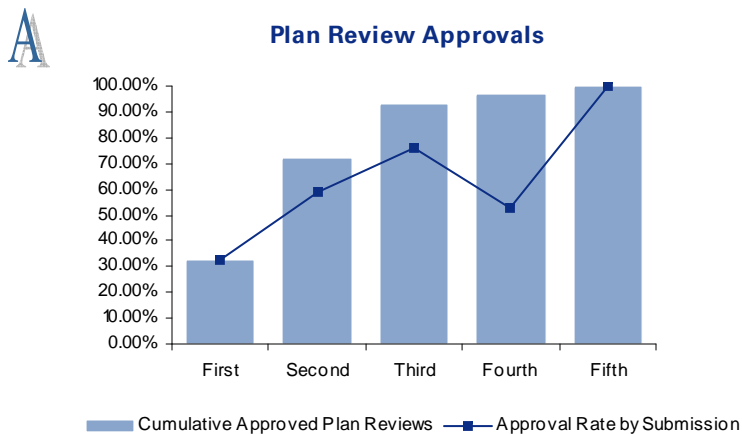
Commercial Miscellaneous – Site Review

Of the 255 commercial miscellaneous plans selected, 251 were submitted for site review and the exhibits below reflect:

Graph A: 32% of plans approved on the first submission

56% average plan approval rate on the first three submittals

Graph B: Average plan review 5.2 calendar days per submittal



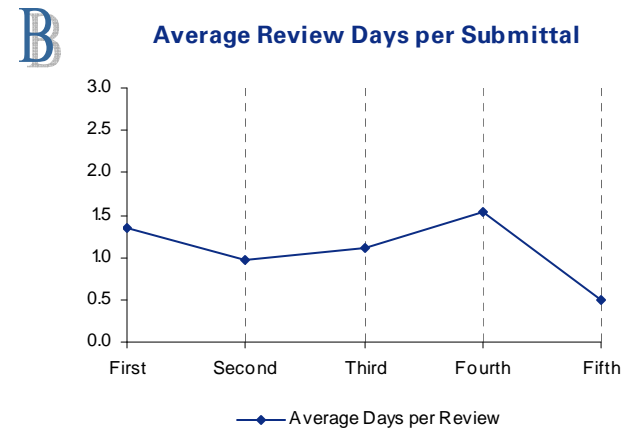
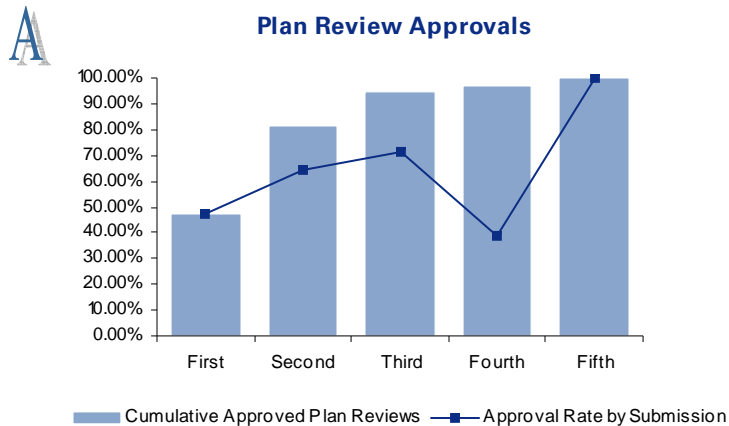
Commercial Miscellaneous – Building Review

Of the 255 commercial miscellaneous plans selected, 242 were submitted for building review and the exhibits below reflect:

Graph A: 48% of plans approved on the first submission

61% average plan approval rate on the first three submittals

Graph B: Average plan review 1.1 calendar days per submittal

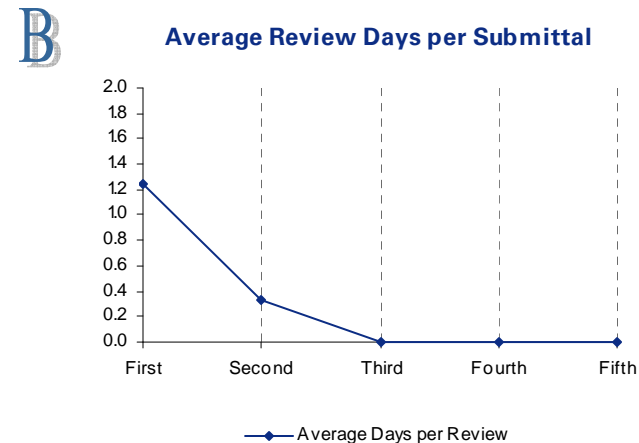
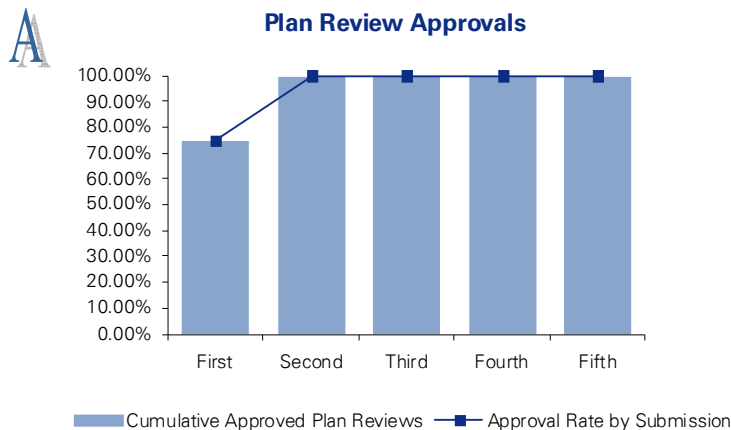


Commercial Repair/Remodel – Site Review

Of the 79 commercial repair / remodel plans selected, 12 were submitted for site review and the exhibits below reflect:

Graph A: 75% of plans approved on the first submission
75% plan approval rate on the first submittal

Graph B: Average plan review 0.8 calendar days per submittal



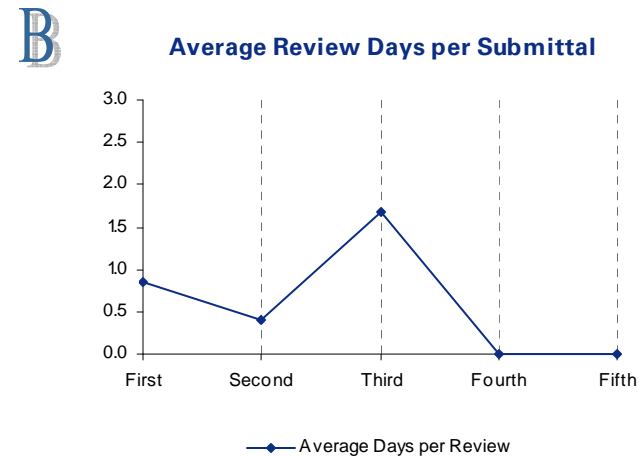
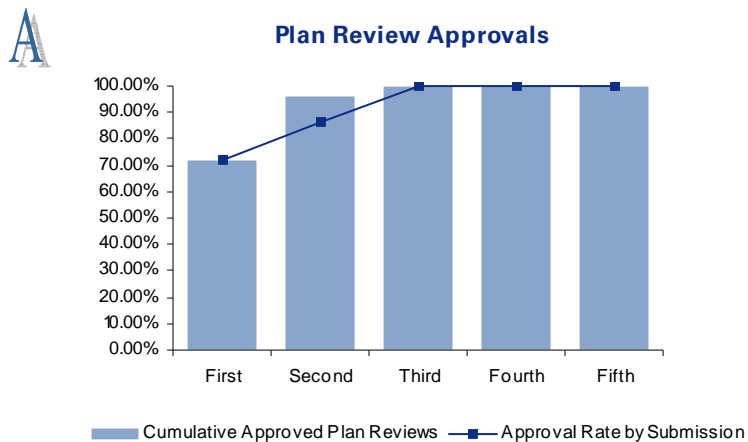
Commercial Repair/Remodel – Building Review

Of the 79 commercial repair / remodel plans selected, 78 were submitted for building review and the exhibits below reflect:

Graph A: 72% of plans approved on the first submission

79% average plan approval rate for the first two submittals

Graph B: Average plan review 1 calendar day per submittal



Section 4

Project Outcomes

Baseline KPIs – Intake and Customer Service

PERFORMANCE INDICATOR	MEASUREMENT
Customer wait time	90% of customers begin intake processing within 30 minutes of customer arrival time
Responsiveness to follow-up phone calls	90% of client facilitators' telephone messages are returned within four hours
Responsiveness to first-time calls	75% of customer telephone inquiries are resolved without transferring the caller
Predictability of services	Client facilitators provide City code and procedure information consistent with other City staff 90% of the time
Completion of checklist by client facilitators	90% of project checklists are completed accurately and do not require the plan review staff to follow up with the customers for additional project information
Completion of permit by client facilitators	90% of the permits issued have been entered in the system with complete and accurate information and do not require additional follow up from the inspection staff
Professionalism	Clearly communicate issues and maintain a positive attitude 100% of the work day
Online project management	Access to the City's website for internet-based permitting and records retrieval 97% of the work week

Baseline KPIs – Plan Review Summary

PERFORMANCE INDICATOR	MEASUREMENT (Business Days)	
	First Review	Subsequent Reviews
Residential Building and Site - New Construction		
Production Homes / Additions	5-7 days	3-5 days
Custom Homes	5-7 days	3-5 days
Residential Building and Site - Alterations		
Alterations	5-7 days	3-5 days
Commercial Building and Site - New Construction		
Small Scale ⁽¹⁾	10-15 days	8-12 days
Large Scale ⁽²⁾	15-22 days	13-17 days
Commercial Building and Site - Alterations		
Small Scale ⁽¹⁾	9-14 days	7-12 days
Large Scale ⁽²⁾	14-20 days	11-17 days
Plan Review Completion		
Percentage of plan reviews completed in the KPI timeframe	90%	90%

⁽¹⁾ Single-level commercial property <20,000 square feet.

⁽²⁾ Single-level commercial property >20,000 square feet, and all multi-level projects.

Note: More complex plans may require additional time such as variance review. Time required to advertise public notices, conduct hearings and seek required approvals would be in addition to the above times.

Baseline KPIs – Plan Review Detail

PERFORMANCE INDICATOR	MEASUREMENT (Business Days) ⁽³⁾	
	First Review	Subsequent Reviews
Residential Building and Site		
Production Homes / Alterations	5-7 days	3-5 days
Custom Homes (New Construction)	5-7 days	3-5 days
<i>CSD Intake</i>	<i>1 day</i>	<i>1 day</i>
<i>CSD Bldg/Site Plan Review</i>	<i>2-3 days</i>	<i>1-2 days</i>
<i>Parks & Recreation</i>	<i>1-2 days</i>	<i>1-2 days</i>
<i>CSD Processing</i>	<i>1 day</i>	<i>1 day</i>
Commercial Building and Site (New Construction)		
Small Scale ⁽¹⁾	10-15 days	8-12 days
<i>CSD Intake</i>	<i>1 day</i>	<i>1 day</i>
<i>CSD Site Review</i> ⁽⁴⁾	<i>3-5 days</i>	<i>2-3 days</i>
<i>CSD Bldg Review</i>	<i>2-3 days</i>	<i>1-2 days</i>
<i>Parks & Recreation</i>	<i>3-5 days</i>	<i>3-5 days</i>
<i>Fire</i>	<i>3-5 days</i>	<i>3-5 days</i>
<i>CSD Processing</i>	<i>1 day</i>	<i>1 day</i>
Large Scale ⁽²⁾	15-22 days	13-17 days
<i>CSD Intake</i>	<i>1 day</i>	<i>1 day</i>
<i>CSD Site Review</i> ⁽⁴⁾	<i>5 days</i>	<i>2-3 days</i>
<i>CSD Bldg Review</i>	<i>3-5 days</i>	<i>2-3 days</i>
<i>Parks & Recreation</i>	<i>3-5 days</i>	<i>3-5 days</i>
<i>Fire</i>	<i>5-10 days</i>	<i>2-5 days</i>
<i>CSD Processing</i>	<i>1 day</i>	<i>1 day</i>

⁽¹⁾ Single-level commercial property <20,000 square feet.

⁽²⁾ Single-level commercial property >20,000 square feet, and all multi-level projects.

⁽³⁾ 90% of Plan Reviews completed in the time frame noted. Some review activities are performed concurrently.

⁽⁴⁾ Note: Variances from historical New Commercial

Baseline KPIs – Plan Review Detail

PERFORMANCE INDICATOR	MEASUREMENT (Business Days) ⁽³⁾	
Commercial Building and Site (Alterations & Improvements)	First Review	Subsequent Reviews
Small Scale ⁽¹⁾	9-14 days	7-12 days
<i>CSD Intake</i>	1 day	1 day
<i>CSD Site Review</i>	2-4 days	1-3 days
<i>CSD Bldg Review</i>	2-3 days	1-2 days
<i>Parks & Recreation</i>	3-5 days	3-5 days
<i>Fire</i>	3-5 days	3-5 days
<i>CSD Processing</i>	1 day	1 day
Large Scale ⁽²⁾	14-20 days	11-17 days
<i>CSD Intake</i>	1 day	1 day
<i>CSD Site Review</i>	4 days	2 days
<i>CSD Bldg Review</i>	3-4 days	2-3 days
<i>Parks & Recreation</i>	3-5 days	3-5 days
<i>Fire</i>	5-10 days	5-10 days
<i>CSD Processing</i>	1 day	1 day
Responsiveness to phone calls	90% of plan review telephone messages are returned within four hours of receipt	
Predictability of services	Plan reviewers provide City code and procedure information consistent with other City staff 90% of the time	
Completion of checklist by plan reviewers	90% of project checklists are completed accurately and do not require the plan review staff to follow up with the customers for additional project information	
Professionalism	Clearly communicate issues and maintain a positive attitude 100% of the work day	

⁽¹⁾ Single-level commercial property <20,000 square feet.

⁽²⁾ Single-level commercial property >20,000 square feet, and all multi-level projects.

⁽³⁾ 90% of Plan Reviews completed in the time frame noted. Some review activities are performed concurrently.

Baseline KPIs – Plan Review Time for Consulting Departments

PERFORMANCE INDICATOR	MEASUREMENT (Business Days) ⁽³⁾
Commercial (New Construction)	
Small Scale ⁽¹⁾	
<i>Zoning/LDC</i> ⁽⁴⁾	3-5 days
<i>Urban Design</i>	2-4 days
<i>Transportation</i>	3-8 days
<i>Stormwater</i>	3-5 days
<i>Water / Wastewater</i>	5-15 days
Large Scale ⁽²⁾	
<i>Zoning/LDC</i> ⁽⁴⁾	3-5 days
<i>Urban Design</i>	2-5 days
<i>Transportation</i>	5-10 days
<i>Stormwater</i>	5 days
<i>Water / Wastewater</i>	5-15 days
Commercial (Alterations & Improvements)	
Small Scale ⁽¹⁾	
<i>Zoning/LDC</i> ⁽⁴⁾	3-5 days
<i>Urban Design</i>	2-4 days
<i>Transportation</i>	3-8 days
<i>Stormwater</i>	3-5 days
<i>Water / Wastewater</i>	5-15 days
Large Scale ⁽²⁾	
<i>Zoning/LDC</i> ⁽⁴⁾	3-5 days
<i>Urban Design</i>	2-5 days
<i>Transportation</i>	5-10 days
<i>Stormwater</i>	5 days
<i>Water / Wastewater</i>	5-15 days

⁽¹⁾ Single-level commercial property <20,000 square feet

⁽²⁾ Single-level commercial property >20,000 square feet, and all multi-level projects

⁽³⁾ 90% of Plan Reviews completed in the time frame noted.

⁽⁴⁾ More complex plans may require additional time such as variance review. Time required to advertise public notices, conduct hearings and seek required approvals would be in addition to the above times.

Note: The times on this page are outside of the CSD review times.

Baseline KPIs – Inspections

PERFORMANCE INDICATOR	MEASUREMENT
Inspection response time	Inspectors perform inspections within 24 hours of customer request for 90% of requests
Accessibility of inspectors	90% of Inspector phone messages are returned within four hours of receipt
Predictability of services	Inspectors provide City code and procedure information consistent with other City staff 90% of the time
Inspection checklists	90% of inspection checklists are accurate and do not require corrective follow-up action
Professionalism	Clearly communicate issues and maintain a positive attitude 100% of the work day

Next Steps – Overview

CSD should consider the following areas to enhance performance and benefit further from established key performance indicators:

1. Data Collection
 - CSD needs to collect sufficient information to report performance
2. Reporting
 - CSD should report performance timely to stakeholders
3. Data Analysis
 - CSD will gain an understanding of performance compared to the baseline KPIs and refine the KPIs to meet operational needs
4. Process Improvements
 - CSD's performance improvements may lead to improved financial stability and the ability to establish CSD financial KPIs and inter-agency agreements with other City departments

Next Steps – Data Collection

- Identify potential system replacement for the Plan Review Log database or update the existing plan review data collection and monitoring process including:
 - Format database fields for consistent data collection
 - Align plan category codes with KPI metrics
- Expand data collection activities to include CSD Customer Service and Intake and Inspection KPIs
- Train CSD personnel

Next Steps – Reporting

- Develop meaningful dashboards to reflect CSD performance
- Monitor baseline KPI results and adjust to meet management's needs and the changing economy
- Identify the variances in permitting approval timeframes
- Customer time / slack time in overall permit process time
- Internal timeframes for plan review disciplines
- Present KPIs to other City departments as basis for inter-agency agreements
- Distinguish call types and report transfer rates by type

Next Steps – Data Analysis

- Identify opportunities to increase the average number of plan review approvals during first and second plan review submission.
- Identify incentives to increase accuracy of submitted plans and reduce processing time, such as reviewing the fee structure for incentives and penalties, and extend use of Preliminary Plan Reviews (PPRs).
- Reducing the number of re-submissions should reduce overall time per plan, decrease cycle time, and increase throughput.

Next Steps – Process Improvements

Interagency Agreements

- Format inter-agency agreements with other City departments that include performance objectives, tracking and reporting

Change Management

- Professional development program including training requirements and knowledge standards by employee grade
- Evaluate market conditions and develop contingencies for CSD response to demand elasticity

Next Steps – Process Improvements

Technology-Based Improvements

- Determine viability of legacy DOS-based permitting system
- Implement web-based permit tracking system

Customer Outreach

- Communicate performance regularly to customers
- Proactively communicate code and process changes to customers
- Look for ways to provide expedited service option
- Develop customer training program for CSD processes and initiatives
- Develop a process to measure customer intake processing time
- Report results of unlicensed work investigation to customers