

2019

City and County of Denver

2019 Technology Services Strategic Plan

Q2 Performance Summary

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Our Mission: To Improve City Performance

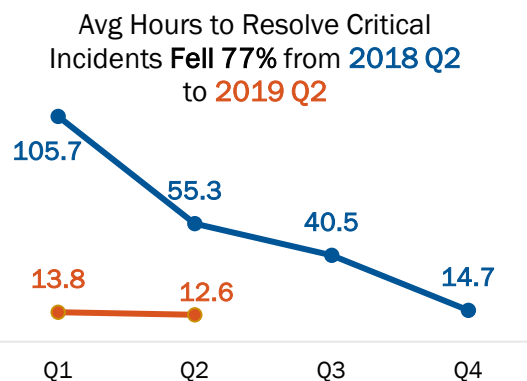
Our Vision: Denver Departments Deliver Exceptional City Services

Reliability – Technology Works as Expected

Why it’s important: Our customers are reliant on technology to provide exceptional city services, so we must provide solutions that meet their needs by being reliable, dependable and available.

2019 Q2 Accomplishments

1. Q2 Mean Time to Resolution for critical/high incidents was a historically low at 12.6 hours. Compared to Q2 of 2018, TS has achieved a **reduction of 77% in the time it takes to resolve an incident**. This frees up capacity to focus on incident avoidance and less critical incident resolution (P3/4).
2. We exceeded our goal of **30 or fewer critical incidents per month** (there were only 54 P1/P2s in Q2).



Tactics to Deliver Strategic Results

Tactic	Status	Why Important	Associated Metrics/Targets	Owner & Contributors
Reducing P1/P2 incidents	Maintain	Critical incidents impair city staff’s ability to provide city services. We want to minimize disruptions and resolve critical incidents quickly when they occur	<ul style="list-style-type: none"> • # of critical incidents (Target: less than 30 per month) • # of incident-free days per month • Mean time to resolution for P1/P2 incidents • CAD Uptime 	Owner: Ryan Stoker Contributors: Gary Pasicznyk, David Garcia
Improve monitoring	In progress	Allows us to identify potential incidents before they become critical and customers notice service disruptions	<ul style="list-style-type: none"> • % of applications, network & server devices monitored (Target: 100%) • % of incidents caught by monitoring before customers submit incidents 	Owner: Marcus Danko Contributors: Brett Killmon, Cathy Orona
P3/P4 incidents <ul style="list-style-type: none"> • Create, implement and train teams to use meaningful 	Continuous	Allows us to identify root causes of common incidents so that we can develop innovative	<ul style="list-style-type: none"> • Overall # of P3/P4 incidents • Specific categories of P3/P4 incidents (e.g., # of password resets, # of 	Owner: Jim Balogh Contributors: Craig Poley, Wendy Shrader,

<p>resolution codes in ServiceNow</p> <ul style="list-style-type: none"> • Improve the Self-Service portal to provide better data in ticket • Reduce ticket reassignments due to incomplete or missing information • Implement self-service password resets 		<p>solutions to address & prevent future incidents</p>	<p>conference bridge requests)</p> <ul style="list-style-type: none"> • Mean time to resolution for P3/P4 incidents 	<p>Marcus Danko, Cathy Orona, Brett Killmon, Stacy Wollman, Nate Kresse, Julie Sutton</p>
<p>Improve change management</p>	<p>Maintain</p>	<p>By continuing to strengthen the change management process we can reduce the number of preventable, change-related incidents</p>	<ul style="list-style-type: none"> • # of change-related incidents per month (Target: Less than 10 per month) • # of change-related incidents caused by TS (vs Vendors) • # of eCABs 	<p>Owner: Julia Matrose</p>
<p>Strengthen disaster recovery planning</p>	<p>In progress</p>	<p>Having strong disaster recovery plans in place are critical to maintaining and/or quickly restoring essential services to the city in the event of a disaster</p>	<ul style="list-style-type: none"> • % of applications with current and actionable disaster recovery plans that meet industry standards 	<p>Owner: Craig Poley</p> <p>Contributors: Chris Todd, David Rhiel, Jim Balogh</p>
<p>Transition secondary data center from 10G to Data Center X</p>	<p>In progress</p>	<p>The effective delivery of city services depends on reliable, modern and secure data centers.</p>	<ul style="list-style-type: none"> • % Complete based on project plan • # of Critical Incidents • % of system redundancy • FTE hours dedicated to system 	<p>Owner: Chris Todd</p> <p>Contributors: James Stoner, Laura Rennich, Chris Hagan</p>

			maintenance (KTLO from SNOW)	
Minimize security vulnerabilities	In progress	Technology must be secure to ensure we provide appropriate access to the appropriate individuals.	<ul style="list-style-type: none"> • % of servers currently patched • Agency security score • TS security score • Overall security score (Targets: 80% for each) 	<p>Owner: Julie Sutton</p> <p>Contributors: Jim Balogh</p>

Identified Challenges

- Prioritizing ServiceNow workload to create Incident Categories and Resolution Codes
- Appropriate model to categorize and report on password resets
- Standardized ticket creation across teams

How we Measure Success (KPIs)

- Mean Time to Resolution (MTTR)
- # of Incidents per Month (Goal: Fewer than 30 P1/P2 per month)

Supporting Resources

- Performance Dashboards
 - [Strategic Pillar – Reliability Report](#) (TS Employee Only Access)
 - [Incident Data SNOW](#) (TS Employee Only Access)
- Incident Criticality Scale
- Continuity of Operations (COOP)/Disaster Recovery Plans

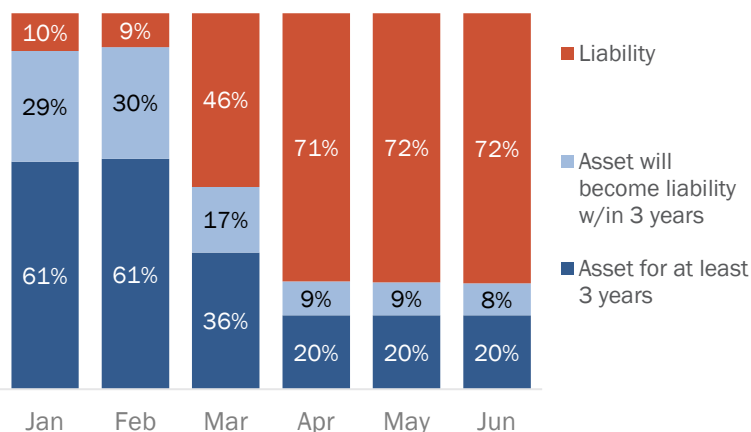
Innovation – Technology that Improves Operational Performance

Why it's important: We are helping to drive innovation in the city with modernization efforts and project delivery improvements.

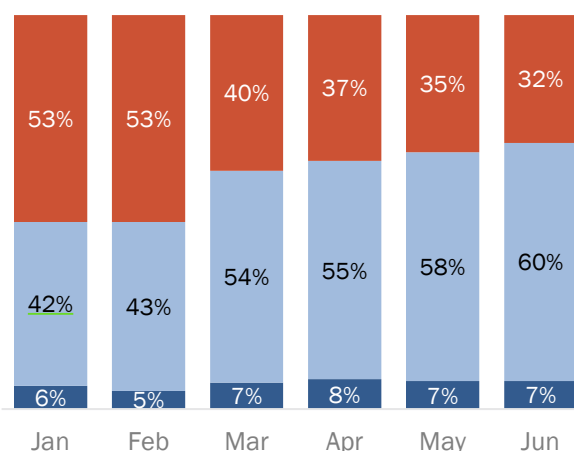
2019 Q2 Accomplishments

1. The Enterprise Modernization team **decommissioned 53 databases/servers**, with another 54 in progress.
2. There was an additional **17.4% (794) reduction in OS liabilities** in Q2.

Database Life Expectancy



Operating System Life Expectancy



Tactics to Deliver Strategic Results

Tactic	Status	Why Important	Associated Metrics/Targets	Owner & Contributors
Hardware Asset Management Tool	Discovery	We are too big to manually update the CMDB across the enterprise. We need a tool to automate this.	Target is to have this in place by end of year 2019. • % of CMDB considered complete and accurate	Owner: Jennifer Randolph Contributors: Robert Bruns Sonya Martin
Asset Management Process	Started	Define standards to optimize the data injected into CMDB from the tool, as well as standards for retirement of current assets, etc.	Publish standards/policies in ServiceNow and train applicable team members accordingly. • # trained	Owner: Jennifer Randolph Contributors: Robert Bruns

MS Access	Discovery	We need to identify data that is at risk for mission critical functions and data privacy. Access database is not a supportable/governable solution.	We have 3180 active Access databases. Some will be transactional and at risk. Target 2 agencies to crawl dbs for Tx samples. <ul style="list-style-type: none"> # of active Access databases (target to reduce by 15% annually) % of databases that contain regulated data 	Owner: Paul Kresser Contributors: Craig Poley, Rebecca DeSantis, Kent Lighthall
Supply & Demand/ Capacity planning	Started	We need the ability to forecast resource availability.	Expand Grant Thornton pilot to be TS wide. Targeting EOY % of projects completed "on-time"	Owner: Chris Binnicker Contributors: Andrea Denis
Project Variance	Started/in process	Provides more realistic timeframes and budgets for customers.	Schedule and budget variance from estimation to delivery. Targeting Q3. <ul style="list-style-type: none"> Variance to budget Variance to schedule	Owner: Andrea Denis Contributors: Chris Pamerter, Jeremy Tuttle
Improve accuracy and completeness of CMDB	Not Started	We need the CMDB accurate to be able to prioritize our technical debt activities	% of CMDB considered accurate	Owner: Craig Poley Contributors: Julie Sutton
Apply I-Fund post-implementation/ investment reviews to other projects	Started	To ensure we are effectively executing and to ensure that we are providing business value	We would like to have this implemented by Q3 2019. We also need to establish process and governance for this tactic. Realized ROI	Owner: Andrea Denis Contributors: Chris Pamerter, Jeremy Tuttle

Identified Challenges

- Budget can be a blocker, especially for the tool purchase. Discovery tool for asset is required. Need to align portfolio to Mayoral Priorities. We do not have direct alignments with Agencies for ROI; same applies to internal customers. Access (dbs) will be a challenge. Post-project reviews depend on Intake performing Value Case analysis upfront.

How we Measure Success

- Technical Debt
- Baseline Project variance

Supporting Resources

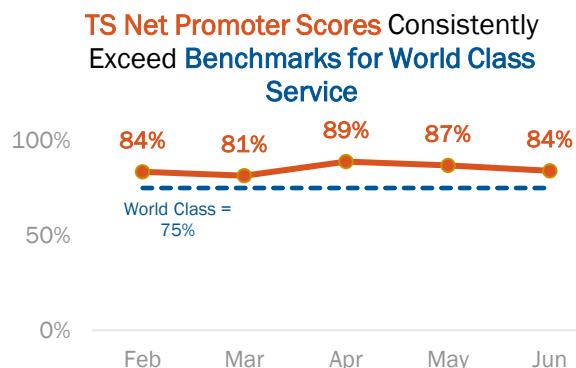
- Performance Dashboards
 - [Technical Debt Mockup](#) (TS Employee Only Access)
 - [PMO Report](#) (TS Employee Only Access)

Access – Technology Connects Customers to Information & Services

Why it’s important: It is fundamental to our mission to ensure all our customers have fair, equitable, and timely access to the information and services they are seeking.

2019 Q2 Accomplishments

1. **Net Promoter Scores (NPS) for TS** have consistently remained **above 80%** - an exceptional feat given that NPS scores of 75% are considered world class.
2. Service Desk **First Call Resolution rates remained high – between 66-72%** throughout Q2.
3. DMMS **increased average weekly engagement rates** with Facebook posts **by 17%** in Q2 (from of 3.6% in Q1 to 4.2% in Q2).



Tactics to Deliver Strategic Results

Tactic	Status	Why Important	Associated Metrics/Targets	Owners & Contributors
Reduce backlog of support tickets	In Progress	To deliver great customer service, we must promptly resolve support tickets. Allowing tickets to erroneously remain open prevents us from actively managing our backlogs.	<ul style="list-style-type: none"> • % of incident tickets <5 days open • % of request tickets <10 days open • % of incident and request tickets >30 days open 	Owner: Jim Balogh Contributors: Director of Service Delivery (TBD) Robert Bruns Craig Poley, Jennifer Randolph
Promote Digital Equity and Inclusion through broadband access	In Progress	Access to high-speed internet is imperative to bridging the digital divide.	<ul style="list-style-type: none"> • % of City Buildings offering free Guest Wifi • % of City Buildings that possess a public access station (kiosk) • % of Denver households with internet access • Direct or in-kind contributions from telecom franchise agreements 	Owner: Todd Matthews Contributors: Cathy Orona Chris Hagan Todd Matthews, Jenny Schiavone, Julie Martinez

Incorporate customer feedback into Access Strategy	In Progress	We need to understand our customers access needs before we can design and implement solutions for them.	<ul style="list-style-type: none"> • TS Net Promoter Score • Service Desk First Call Resolution rates • Voice of Customer quantitative Survey 	<p>Owner: Chris Binnicker</p> <p>Contributors: Director of Customer Support (TBD) Jennifer Randolph Jenny Schiavone</p>
Implement tools and channels to collect real-time customer feedback	Not Started	Customers are most likely to respond in the immediate aftermath of their transaction/experience with us. We want to capture that feedback to better understand how we can design and implement solutions tailored to their needs.	<ul style="list-style-type: none"> • % Customer Satisfaction • Response rates by feedback channels (social media, mobile, web, etc.) 	<p>Owner: Jenny Schiavone</p> <p>Contributors: Director of Customer Support (TBD)</p>
Consolidate Social Media Accounts	In Progress	Engagement efforts will be more effective when consolidated into fewer accounts	<ul style="list-style-type: none"> • # of accounts and associated followers for the top 15 • Engagement rates 	<p>Owner: Jenny Schiavone</p>
Reduce the time to resolve issues by ensuring they are routed and assigned accurately.	In Progress	The greater the amount of redirection of tickets correlates to increased frustration for our customers. Our goal is to properly route and resolve tickets as efficiently as possible.	<ul style="list-style-type: none"> • Mean time to Resolution • Distribution of ticket assignments and transfers by team • First Call Resolution (FCR) • NPS 	<p>Owner: Jennifer Randolph</p> <p>Contributors: Robert Bruns Ryan Stoker Jim Balogh Craig Poley</p>

Identified Challenges

- A large backlog of old tickets that are likely no longer relevant currently exists. A cleanup effort must be made to clear out that backlog so that we can better track ticket backlogs moving forward.
- In the absence of customer data to inform our access strategy, these tactics and objectives are likely to change.

How we Measure Success

- Net promoter scores for 311 call center and TS at large
- Reduced backlog of support tickets older than 5 days
- 311 first call resolution rate (Goal: at least 65% of contacts with a first call resolution)
- Social media engagement rates

Supporting Resources

- Performance Dashboards
 - [Consolidated Access Dashboard](#) (TS Employee Only Access)
 - [Facebook Dashboard](#) (TS Employee Only Access)

Partnership – Forward-thinking Collaboration with Customers

Why it's important: Our customers provide new ideas, business perspective, and overall value through our partnerships. Our success is dependent on our ability to collaborate positively with them.

2019 Q2 Accomplishments

1. Developed a new set of metrics to track Intake process performance and developed a new dashboard that includes relevant KPIs.
2. Established a new Safety BRM partnership.

Tactics to Deliver Strategic Results

Tactic	Status	Why Important	Associated Metrics/Targets	Owners & Contributors
Implement customer-facing dashboards	In progress	Customer-facing dashboards will improve visibility into customer metrics such as requests/incidents, customer satisfaction, and security.	<ul style="list-style-type: none"> • BRM and PMO metrics 	Owner: Paul Kresser Contributors: Kent Lighthall, Chad Mitchell, Kevin Anthony
Establish a more comprehensive lessons learned program to centralize pertinent lessons learned, assign to a manager for action, and create metrics around continuous improvement efforts and actions taken from lessons learned process	In progress	Project priorities, baselines, and satisfaction for customers can change over time, so a process to review prioritization and utilize customer feedback will lead to optimization of project resources.	<ul style="list-style-type: none"> • # of project priority changes per customer • Re-baseline metrics – volume, reason code / Evaluate strategies to overcome the most frequent causes of a re-baseline 	Owner: Chris Pamerter Contributors: Jeremy Tuttle Andrea Denis
Complete implementation	In progress	OBTAIN processes are the first step in identifying a	<ul style="list-style-type: none"> • Intake metrics from SNOW (application reuse and 	Owners: Kevin Anthony

of OBTAIN processes		solution so it is important that they are producing valuable results.	financial benefits, # of days in process, etc.)	Contributors: Sterling Field
Create a rationalization process to map business capabilities to services and products	In progress	By creating a rationalization process to map business capabilities to active services and products, TS can fully utilize existing resources and increase application modernization.	<ul style="list-style-type: none"> • # of business capabilities related to services/products • # of new requests solutioned with existing services/products • Reduce technical debt 	Owners: Chad Mitchell Contributors: Sterling Field, Kevin Anthony

Identified Challenges

How we Measure Success

- % of Intake demands with needs that can be met with a pre-existing enterprise solution
- % of Intake demands closed within 30 days
- BRM customer satisfaction survey

Supporting Resources

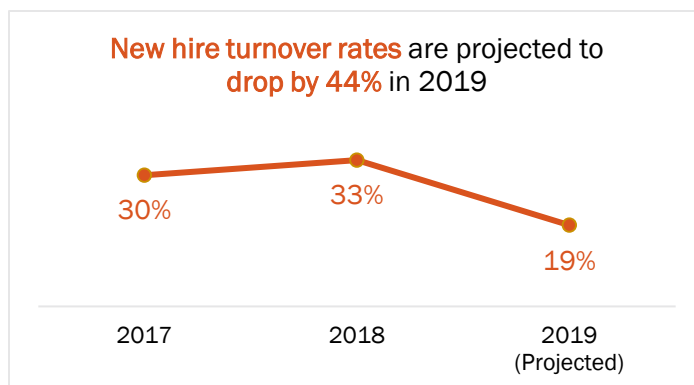
- Performance Dashboards
 - [Intake/OBTAIN Metrics Dashboard](#) (TS Employee Only Access)
 - [311 Net Promoter Dashboard](#) (TS Employee Only Access)

Employee Engagement – Employees Go the Extra Mile for Colleagues & Customers

Why it's important: Organizations with highly engaged employees are better able to retain staff, see higher customer satisfaction, and outperform organizations with lower engagement levels.

2019 Q2 Accomplishments

1. Worked with OHR to improve the onboarding process & **reduced new hire turnover by a projected 44%** (down to a total projected 2019 NH turnover of 19%).
2. Staff recognized each other's excellence by handing out **200 Caught Ya cards to 132 people** in Q2.



Key Activities in Progress

- Collaborating with OHR to develop metrics to track and improve manager performance because strong managers are critical to cultivating engaged, productive employees.

Identified Challenges

How we Measure Success

- Employee Engagement Index from the EE Survey
- Employee turnover rates (first year, high performer, and overall turnover rates)
- # of employees who have given and received Caught Ya Cards
- % of employees who are familiar with the TS Strategic Plan

Supporting Resources

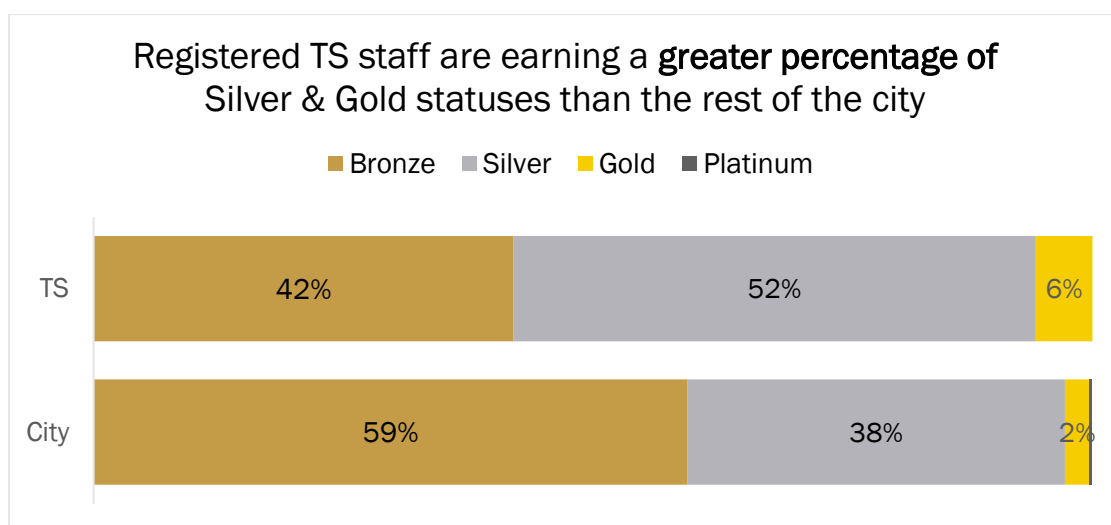
- Performance Dashboards
 - [Health & Well-Being and Employee Engagement](#) (TS Employee Only Access)

Health & Well-Being – Employees are Inspired to Invest in Themselves

Why it's important: We all offer the best hours of our day to enable and improve the technology supporting the city. In exchange, we want to encourage our employees to invest in themselves to maintain their health and overall wellbeing.

2019 Q2 Accomplishments

1. **85% of staff have development goals** entered in Workday and **29% have approved training requests**.
2. TS has consistently **outpaced the rest of the city in Vitality** registration (57% vs 28% city-wide) and earning Silver & Gold Vitality Statuses (58% vs. 41% city-wide).



Key Activities in Progress

- Developing additional incentives related to Vitality participation and completion of development goals.

Identified Challenges

- Limited attendance at lunch-n-learns related to health and wellbeing topics

How we Measure Success

- Vitality registration and status
- % of employees with development goals in Workday
- % of employees who have completed training

Supporting Resources

- Performance Dashboards
 - [Health & Well-Being and Employee Engagement](#) (TS Employee Only Access)