CITY OF **SAN JOSE**
CAPITAL OF SILICON VALLEY

Memorandum

TO: SMART CITIES AND SERVICE IMPROVEMENTS COMMITTEE

FROM: Chris Burton

SUBJECT: DEVELOPMENT SERVICES TRANSFORMATION STATUS REPORT

DATE: October 27, 2021

Approved _____ Date ___10/28/2021___

RECOMMENDATION

Accept the status report on Development Services Transformation efforts, which includes initiatives to ease customer experience and improve the effectiveness of Development Services Partners (Planning, Building, Public Works, and Fire) processes, such as impact metrics, operationalization of new workflows and technologies, and work with stakeholders.

OUTCOME

The Smart Cities and Service Improvements Committee (Committee) will receive a status report reviewing the progress of the City's efforts to improve development services for community members/customers. The Committee's feedback will help staff in future planning and implementation.

BACKGROUND

The original Integrated Permitting System ("IPS") implementation schedule, finalized in November 2016, targeted the completion of the project over 23 months and concluding by January 2019[1]. In May 2018, when it appeared that the project implementation schedule was not going to be met, the City contracted with Gartner, Inc., to conduct a "health check" on the project, perform an independent verification (IV&V) and validation risk assessment, and make summary recommendations on how to reset the project to achieve a successful outcome[2]. Upon conclusion of the IV&V assessment, Gartner made the following recommendations:

---

[1] March 1, 2016 Contract Approval with CSDC – https://records.sanjoseca.gov/Contracts/CON6618140.PDF
[2] April 19, 2018 Standard Consulting Agreement with Gartner – https://records.sanjoseca.gov/Contracts/CON663307000.pdf

1) Adopt an agile methodology for software implementation;
2) Focus on the highest priority requirements that can be tied to clear, measurable business value for the City to deliver a minimum viable product within 2 - 3 sprint cycles; and
3) Implement changes to the team to ensure a focused approach and dedicated members.

The Development Services Partners ("Partners") restarted the project with a new approach and rebranded the work as the "Development Services Transformation." The Partners established a new Transformation Team for its governance structure, consisting of dedicated cross-departmental staff and vendor partners to consistently deliver on goals prioritized by the group. The Transformation Team applied and still uses an agile scrum approach to "chunk" out the work and swarms resources around key priority areas tracked using the Objectives and Key Results (OKRs) model[3].

What are OKRs?

OBJECTIVES AND KEY RESULTS

OKRs are a management methodology which helps to ensure that your company focuses efforts on the same important issues throughout the organization.

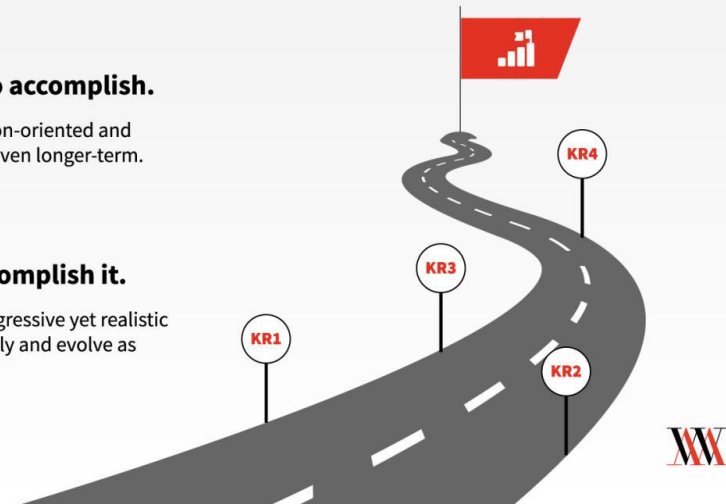OBJECTIVES

An Objective is what you want to accomplish.

A good Objective is significant, concrete, action-oriented and inspirational. Can be set annually or over an even longer-term.

KEY RESULTS

Key Results are how you will accomplish it.

Good Key Results are specific, timebound, aggressive yet realistic measurable and verifiable. Can be set quarterly and evolve as work progresses.

What Matters

Measure What Matters, John Doerr[4]

Central to the agile approach was a new governance structure that allowed the team to make decisions and move quickly. Previously, teams showed limited forward progress in cases wherein key decisions were re-debated for extended periods. Expeditious issue resolution has been enabled through an Executive Committee composed of department directors and a City Manager's Office executive sponsor who assist the team by setting strategic direction and clearing roadblocks. The combination of rigorous project planning, governance, and status reporting applied to the reset Development Services Transformation project also addressed

---

[3] Measure What Matters: OKRs –https://www.whatmatters.com/faqs/okr-meaning-definition-example/
[4] Doerr, John. 2018. *Measure What Matters.* London, England: Portfolio Penguin.

findings from the City Auditor's November 2019 Report on Technology Deployments[5]. The report identified causes for projects such as Development Services Transformation missing targets and requiring intervention.

After the Gartner risk assessment, staff initiated an amendment to the contract with vendor CSDC— later renamed Calytera (2019) and then purchased by Granicus (2020)— to focus on high-impact requirements. The scope of the contract was amended and approved by Council on June 25, 2019[6], and set four key project components:
1) AMANDA permitting system upgrade;
2) Electronic plan review;
3) Mobile inspection application; and
4) Upgraded public portal.

As provided in the October 2020 update to the Committee[7], several key milestones in this technology program were accomplished including the successful delivery of the AMANDA permitting system upgrade in November 2019, as well as the Electronic Plan Review System (SJePlans) deployment for Public Works and common Planning Division applications, and the mobile inspection application for Building Inspection in April 2020.

The Development Services Transformation Team continues to make strides towards modernizing the technology platforms that underpin improving development permitting processes for residents, businesses, and the development community. In some circumstances, the COVID-19 pandemic has accelerated the drive to digitize aspects of the Transformation initiative; in many other areas, temporary process modifications were made due to the pandemic and shelter-in-place health orders. The Transformation initiative must sustain the long-term improvements. The OKRs for the current quarter (Q4 2021) can be found in Appendix A and included below.

---

[5] November 2019 City Auditor Report of Technology Deployments –
https://www.sanjoseca.gov/home/showdocument?id=44698
[6] June 25, 2019 Contract Amendment with CSDC – https://records.sanjoseca.gov/Contracts/CON661814-008.pdf
[7] October 1, 2020 Smart Cities and Service Improvement Committee File # CC20-154 -
https://sanjose.legistar.com/LegislationDetail.aspx?ID=4642501&GUID=1800152B-9D5B-417C-92AC-9E8FCD389BAE&Options=&Search=

Development Services Transformation Q4 2021 (Oct. - Dec.)

Objectives

Simple, Self-serve, Digital User Experience	Clear, Consistent, Effective Process	Strong, Collaborating Team	Great Internal Tools to Enable Teamwork

EXTERNAL | **INTERNAL**

Key Results

EXTERNAL		INTERNAL	
❑ Complete 75% development and 50% Testing for SJPermits 2.1.0*	❑ Publish Housing Dashboard* ❑ Create Four New Guides or Demo Videos to support customer SJP v2.0 adoption	❑ Complete 75% of configuration and 25% of testing for Planning Subdivision folder enhancements* ❑ Approve Dev Service Tech Roadmap ❑ 100% of Planning Initial Comment Letters have Comments Entered into SJePlans	❑ Complete 90% of AMANDA Building folder configuration for electronic plan review integration* ❑ Finalize functional requirements for the replacement of CES

*brought forward or adapted from a Q3 Key Result

Development Services Transformation

4

ANALYSIS

The Development Services Transformation Team delivered several significant milestones since the October 2020 Smart Cities and Service Improvements Committee meeting relating to the four key components of the Development Services Transformation program.

Electronic Plan Review & Submission

One of the most notable improvements was the expansion of the electronic plan review system, SJePlans, to Fire Prevention. Now, Fire Special Systems Permits and Hazardous Materials System Permits can be processed online. The expansion gives Fire customers the ability to upload plans, review comments and resubmit revisions all in a single platform. This gives the customer greater insights into the development review process and their status in it. The Fire Prevention enhancement to SJePlans completed the second major phase of this project, joining the Department of Public Works and the Planning Division on the platform and giving customers a more consistent application process across Development Services Partners processes.

Fire Prevention staff benefit from the software's workflow and organization features, saving significant administrative processing hours in processing permit applications. With a single location for applicants to submit files, plans are automatically triaged to the appropriate reviewers, eliminating administrative routing ensuring paper plans are in the right hands. Every project reviewer can upload their comments and markups in the software for seamless consolidation for both the lead reviewer and the customer. Each comment, on each version of

the plans, can be traced to the reviewer for quicker communication and identification of any issues with a permit application. Finally, staff use the software to compare any changes on resubmittal plans with previous versions, automatically allowing the reviewers to focus on the updates and not having to re-review already approved aspects of the plans.

Public Portal

An important component of the Transformation technology program is the replacement of the public-facing portal, known as SJPermits.org or SJPermits. The portal has been vital to Development Services during the pandemic by serving as a key communication platform between customers and Development Services Partners. The SJPermits.org portal is the main location for customers to apply for self-administered Building permits, pay for permits, schedule Building inspections, find status for permit applications, and download project application documents. Before the pandemic, permits self-administered online composed approximately 40-50% of all Building Permits issued. Since late March 2020, online permit issuance has exceeded to 75% of all permits issued. However, the old SJPermits.org portal was built on a now-obsolete technology that limited the number of customers who could access the portal online, and online application submittals have traditionally been limited to simple building permits such as appliance replacements, re-roofing, and minor remodels.

In early November 2020, the Transformation Team started the transition from the old SJPermits.org to the new SJPermits.org portal, staging a five-month "soft launch" to aid customers in the transition to the new website. During this time, customer feedback, bugs, and helpful enhancements were incorporated to improve the customer experience. These efforts supported the final transition to the new portal in April 2021. The transition period also gave customers time to migrate their accounts from the original portal, based on a username sign-in system, to sign-in with email addresses. As customer adoption of the new portal progressed, online permit issuance reached all-time highs: exceeding 1,800 permits issued per month in three of the last four months, compared to an average of 925 per month with the original portal.

While the scope of the first phase of the new SJPermits.org was to replicate the features of the original portal but with a modern experience, additional enhancements expanded the impact to new customers. The Building Division and technology staffs identified and launched eight new simple permit types to be available for customers to self-administer online.

	Permit Type	Launch Date	Permits Issued Online Since Launch*
1	Stationary Battery Installation	Sept 2020	1,656
2	Brace and Bolt Earthquake Retrofit	Sept 2020	407
3	Damage Survey Inspection	Feb 2021	59
4	Historic Inventory Subtrade Permits	Mar 2021	114
5	Temporary Power Pole	Mar 2021	91
6	Tankless Water Heater	April 2021	7

7	Electric System Subpanel for Commercial and Multifamily	May 2021	17
8	Minor Kitchen and Bath Remodels	Oct 2021	30

*data through October 15, 2021

Customers can now take advantage of this simple, self-service digital tool to enter their permit in as little as fifteen minutes. The introduction of these new permit types online saved staff at least ~1,500 hours total to dedicate to more complex projects.

Permit Center Intake Appointments and Virtual Services

The Development Services Permit Center was heavily impacted during the COVID-19 shelter-in-place health orders. For many years, the Permit Center operations have centered around welcoming customers in-person at City Hall and assisting them with their permitting needs. Once in-person operations were suspended, Development Services quickly pivoted to an online and email-dependent model to maintain operations and communications with customers. While the shift to email for various customer inquiries was the quickest and most flexible, it was not conducive to the complex interactions required for most permits and led to an unmanageable number of inquiries seven days a week, 24 hours a day.

To help migrate to a more sustainable model that better replicated previous operations in City Hall, the Development Services Partners implemented an intake appointment model that allowed customers to self-book an appointment to meet directly with staff to help them with their permit intake application. Initially launched in March 2021, the first phase of Permit Center Appointments was limited to four major Building permit intake operations: (1) Accessory Dwelling (ADU) application submittals, (2) Simple Permit applications, (3) Over-the-Counter applications, and (4) Plan Review submittals.

Once a customer booked an appointment, they received instructions on how to meet with City staff through video-conferencing. In tandem with the launch of the new appointment booking service, the Building Division launched new Permit Service webpages (https://www.sanjoseca.gov/business/development-services-permit-center/virtual-appointments) to guide customers through the requirements for seven categories of Building permit applications. While demand exceeded the supply of staffing for intake appointments, this new intake model provided an organized process for managing the thousands of inquiries and a guaranteed date and time when a customer's application submittal would be processed.

Since the initial launch of online appointment services with the Building Division, the City has incrementally expanded onsite operations and planned plans for the resumption of onsite services in the Permit Center. When City Hall reopened on August 2, 2021, Permit Center Appointments were successfully expanded to other departments in the Permit Center (Fire Prevention, Public Works, Planning, and Finance) to welcome back customers. The Development Services Partners paired the physical reopening of the in-person Permit Center with the launch of virtual Permit Center Appointments for Fire Prevention, Public Works, and Planning. Since the launch of the

virtual appointments, the Development Service Partners have hosted over 6,000 virtual appointments with customers and nearly 2,000 in-person appointments.

Digital Inspections, Document Imaging, and Public Dashboards

The fourth major component of the Development Services Transformation technology program was the introduction of Digital Inspection Forms. Originally launched by the Building Division in April 2020 to help safely redeploy nearly 70 Building inspectors to the field in May 2020, the digital forms significantly improved the daily operations of the inspection team.

Using a similar technology architecture as the Building Division, in March 2021, the Fire Prevention Division successfully launched the Digital Inspection Form for their Fire System and Hazardous Materials System permit inspections. Fire Prevention experienced similar benefits as the Building team during their rollout, including the automation of the inspection notices that improved customer access to inspection records while saving time for the inspection staff. Results of inspections are now available to the public within two hours of completing the inspection, compared to nearly a week previously. With the previous, paper process, the inspection forms had to be completed by hand, brought back into City Hall, scanned, and uploaded in the electronic content management system so they could be viewed online. Online forms automated tedious manual operations and produced better outcomes for customers.

Before the pandemic, the Transformation Team explored other improvements to the imaging process that, fortunately, predated the sudden transition to digital caused by the COVID-19 shelter-in-place health orders. As presented at the October 2020 Committee meeting, permit files that were posted to the SJPermits.org public portal were required to be printed if they were not already, so they could be routed to the imaging center to be scanned and uploaded in the electronic content management system. Starting in early 2020, the Transformation Team created a separate procedure that utilized uploading digital files into network folders to be reviewed by support staff who would upload publicly into SJPermits.org. Staff further automated the process in 2021 to remove the redundant step of placing files in network drives and instead upload digital files directly in AMANDA to be made available on the public portal. This final improvement to the imaging process saves plan review staff 30-60 minutes per project and helps make project documents more accessible to the public.

All of these imaging improvements, along with the rapid digital transition caused by COVID-19, made significant and permanent impacts on the legacy imagining operations of Development Services. In the Fiscal Year 2020-2021 City Budget Process, Development Services Partners reduced the imagining center operation by 14 positions. This resulted in savings to the City of nearly $1,700,000 per year to achieve City's budget objectives. Staff previously serving on this team were reassigned to other critical and understaffed support operations throughout the Development Services departments.

A priority objective of the Development Service Transformation is to improve the clarity of our processes for customers. This objective includes providing insights into the magnitude and

outputs of our operations through reports and public dashboards. In July 2021, the Accessory Dwelling Unit (ADU) dashboard (https://www.sanjoseca.gov/your-government/departments-offices/planning-building-code-enforcement/planning-division/data-and-maps/development-monitoring/permit-statistics/adu-permits/) was launched to communicate the number of permits submitted and issued for the growing program. These automated and interactive dashboards give the public a better understanding of the scale and popularity of this program without having to formally request updated information from staff or find past presentations on the topic. Similar to the ADU dashboard, a Housing Dashboard will be launched to identify the number of market-rate and affordable units entitled, permitted, and issued new occupancy per year.

Future Enhancements

The focus of next phase of the SJPermits.org portal is to expand online applications to all four Development Service Partners for permit types appropriate for online application. Online applications will enable customers to enter all of their information in SJPermits online, removing the paper application and associated steps entirely. Self-administered permits where the customer can apply, pay for, and receive their permit online without talking to permit center staff (excluding required inspections) will continue to be limited to minor Building Permits because other permit types are too complex and require staff review for safety before they can begin construction.

The future SJ Permits will also allow customers to upload documents, add collaborators, and upload their plan sets to SJePlans, if appropriate, for many new permit types. Customers setting up their permit applications on SJPermits.org will remove significant administrative work in the permitting system, allowing staff to focus more time on supporting customers. In addition, when customers upload their documents, this saves staff time from processing and routing files to the appropriate location. The next phase of SJPermits.org is in development and should complete testing in early 2022. A robust public information campaign and training materials will be required to prepare customers to play a bigger role in our process before Spring 2022.

For the Building Division, the Permit Center Appointments system was a significant improvement to the queueing process that was rapidly established after the start of the COVID-19 pandemic. However, the formal structure of the appointment system limited staff's ability to meet the large customer demand. Building staff found that for fully complete applications, the City can process the permit ahead of the scheduled appointment without having to meet with applicants virtually, saving the customer time. Learning from this experience, the Building Division will pilot a rapid intake process for plan review applications for customers with complete applications in November 2021. Customers will book a place in line for a date when staff will process their intake, provided that their application materials are fully complete. This pilot process will provide clarity to customers and help drive a clear and effective process that increases the number of total customers served while decreasing total time in process.

Plan Review is a complex operation given the numerous codes and policies that must be reviewed by trained staff. The future deployment of electronic plan review software (SJePlans)

for the Building Division will aid in the process tracking and triaging plan sets. Once customers are able to upload their own digital plans and associated files, this will save significant time during the intake process and will help prevent version issues. A project's multiple reviewers will have access to the single source of truth and version to work from. To enable the integration with SJePlans with the main AMANDA permitting system, over 100 modifications to the nearly 20-year old workflows in AMANDA have been identified and are currently in development. Important projects have been postponed to allow key staff to focus on the completion of these modifications by the end of January 2022. Once AMANDA modifications are complete, the implementation of the ProjectDox software (SJePlans) can be completed before the autumn of 2022.

CONCLUSION

The COVID-19 pandemic has caused unique challenges for application intake, plan review, and final inspection. While significant adaptations have been made that help drive digital transformation, many were temporary improvements created as a necessity of the pandemic. To fully transform Development Services, additional efforts are needed to a completely new, fully digital operation.

The key components of the Transformation technology program are clear; however, numerous other enhancements have been identified that can address the customer challenges. Some examples of future enhancements include additional enhancements to permit workflows, expansion of Planning applications available through SJePlans, improvements to the digital inspection form, and new operation dashboards. These ideas and many others are scheduled to be discussed at the November 12th Development Services Transformation retreat to better understand how they align with the original objectives of the initiative.

EVALUATION AND FOLLOW-UP

Staff will return to the Smart Cities and Services Improvements Committee in 2022 to update Committee Members on status and service impacts.

CLIMATE SMART SAN JOSE

The recommendation in this memorandum has no effect on Climate Smart San José energy, water, or mobility goals.

COMMISSION RECOMMENDATION/INPUT

This report was not presented at a Commission.

PUBLIC OUTREACH

This memorandum will be posted on the Smart Cities and Service Improvements Committee Agenda website for the November 4, 2021, meeting.

COORDINATION

This memorandum has been coordinated with the Information Technology Department, Department of Public Works, and Fire Department.

CEQA

Not a Project, File No. PP17-009, Staff Reports, Assessments, Annual Reports, and Informational Memos that involve no approvals of any City action.

/s/
CHRIS BURTON, Director
Planning, Building, and Code Enforcement

For questions, please contact Alex Powell, Chief of Staff, Planning, Building and Code Enforcement, at alexander.powell@sanjoseca.gov.

Development Services Transformation Quarter 4 OKRS

Development Services Transformation Q4 2021 (Oct. - Dec.)

Objectives

Simple, Self-serve, Digital User Experience	Clear, Consistent, Effective Process	Strong, Collaborating Team	Great Internal Tools to Enable Teamwork

EXTERNAL / INTERNAL

Key Results

EXTERNAL

- ❏ *Complete 75% development and 50% Testing for SJPermits 2.1.0**
- ❏ *Publish Housing Dashboard**
- ❏ Create Four New Guides or Demo Videos to support customer SJP v2.0 adoption

INTERNAL

- ❏ *Complete 75% of configuration and 25% of testing for Planning Subdivision folder enhancements**
- ❏ Approve Dev Service Tech Roadmap
- ❏ 100% of Planning Initial Comment Letters have Comments Entered into SJePlans
- ❏ *Complete 90% of AMANDA Building folder configuration for electronic plan review integration**
- ❏ Finalize functional requirements for the replacement of CES

*brought forward or adapted from a Q3 Key Result

Development Services Transformation