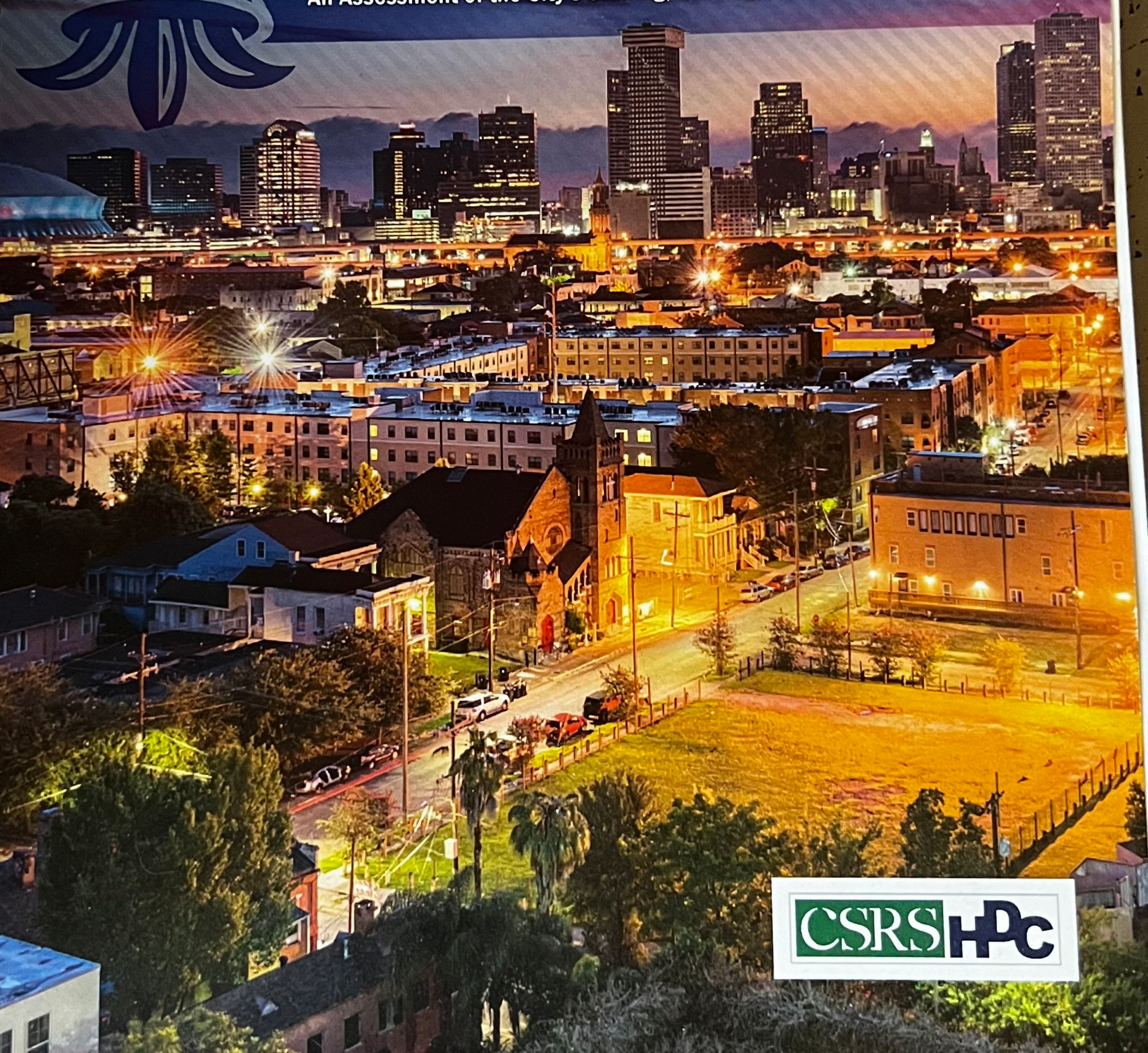


CITY OF NEW ORLEANS | DEPARTMENT OF PUBLIC WORKS
JIRR - 30 DAY ASSESSMENT REPORT
Task Order: 03

IMPLEMENTING THE JOINT INFRASTRUCTURE RECOVERY REQUEST:
An Assessment of the City's Staffing, Funding, Procedures and Processes



CSRS **HPC**



February 5, 2019

Mr. Ramsey Green
Deputy Chief Administrative Officer
City of New Orleans
1300 Perdido Street, Suite 9E06
New Orleans, LA 70112

Dear Mr. Green:

In the Joint Infrastructure Recovery Request, the City of New Orleans and Sewerage and Water Board have a once-in-a-generation opportunity to repair and replace critical infrastructure. No other city in America has such a large, flexible sum of federal funding to restore streets and underground utilities. Since future federal support for infrastructure will likely require matching funds, such an opportunity may never come again.

While the City has begun to put these funds to use, it faces significant barriers to implementing this work efficiently and effectively. This report details the City's challenges identified in the 30-day assessment period but also provides recommendations to successfully address them. If the City takes decisive action to overcome these challenges, it stands to become a national example of how to convert disaster recovery into broad-scale renewal and city resilience.

At its heart, this report recommends the City move beyond treating the JIRR as a list of projects and transform it into a true program. This means dedicating staff exclusively to the program. It also means developing more robust systems to manage the coordination between the various components of the program. These steps should be taken to accelerate the rate of project delivery and ensure the City's reimbursement rate and overall financial health is improved.

Another critical opportunity in developing a true program is to reformulate the method and criteria the City uses in prioritizing and deploying these finite resources. It is critical that the City recognize that the federal funding available to it and the Sewerage and Water Board is not restricted to specific projects or areas but is, in fact, eligible to be spent on any street and utility work that the City and Sewerage and Water Board deem appropriate. For instance, an old street or pipe that was not damaged by Katrina but needs to be replaced due to age is eligible to be funded under this program. While the projects currently in design should continue to move forward, the City can determine its own priorities and the best uses for the remaining funds.

The City has the financial resources it needs to manage this program. However, the City is currently using the administrative portions of the funding faster than it is delivering projects such that it will become unsustainable over the lifecycle of the program. The recommended actions contained herein are critical to the City accelerating project design and delivery commensurate with its costs.

We are confident that the City can transform the Joint Infrastructure Recovery Request into a program that delivers benefits and resilience to the City and its citizens for generations to come.

Sincerely,

A handwritten signature in blue ink, appearing to read 'W. Aertker'.

Walter Aertker



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While the City of New Orleans' (City) and the Sewerage and Water Board's (SWB) Joint Infrastructure Recovery Request (JIRR) is a tremendous opportunity to repair and replace critical infrastructure, the City faces significant obstacles to implementing this work efficiently and effectively. At the request of the City, the CSRS/H. Davis Cole team developed this report, which is the result of a 30-day assessment of the current funding, staffing needs, processes and procedures, and organizational readiness of the City to implement the JIRR. The report details the City's challenges in each area. Accompanying each challenge, however, is a set of recommendations that lays out a path to success. If the City takes decisive action to address these challenges, it stands to become a national example of how to convert disaster recovery into broad-scale renewal and city resilience.

The key findings in this report show that while the City has begun to implement the JIRR, has some strong staff members, and sound procedures for managing projects, the actions of the many inter-dependent components are not well coordinated and adherence to procedures is not strictly nor consistently enforced, leading to inefficiencies in the use of time and funding. Specifically, the lack of an overall programmatic structure coupled with potential personnel and manpower issues creates an environment where projects, scope development, procurement, payment processing, reimbursements, and related tasks can get delayed between staffing components that do not have a shared structure of management and accountability. This has led to a slow rate of project delivery, a lag in reimbursements, inaccurate cost accounting, record retention issues, and an inefficient use of project management and administrative costs. The funding is sufficient to deliver the infrastructure projects and flexible enough to address the City's priorities, but drastic adjustments are needed immediately in order to address the challenges of a program of this magnitude.



The overarching recommendation in this report is that the City should transform its approach to manage the Joint Infrastructure and Recovery Request (JIRR) as a program rather than as a group of projects. Typically, cities with one-time programs of this size and complexity elect to hire leadership and program staff to form a dedicated team that has completed similar programs and allow their core staff to remain focused on the on-going, everyday work of the city. Whether the City continues to execute the JIRR program with City staff only or pursues a hybrid structure, blending City staff and consultants to deliver the JIRR, it is strongly recommended that the City mimic a traditional program management structure to benefit from best practices.

The specific recommendations provided in the 14-point assessment follow three categories of capital improvement best practice themes that involve shifting to a programmatic approach for implementation:

1

Treat the staff and management structure as a program

These recommendations involve organizing and managing the JIRR as a unified team

**Report sections:
D, E, F**

2

Treat the processes and systems as a program

These recommendations involve strengthening the coordination and integration of processes and systems to facilitate visibility, accountability, and efficiency across the program

**Report sections:
A, B, C, K, N**

3

Treat the scope of work as a program

These recommendations involve taking a holistic approach to the scope of work and funding, assessing and prioritizing the City's needs to achieve the greatest impact for the public

**Report sections:
G, H, I, J, L, M**

1

Treat the staff and management structure as a program

Report sections: A, B, C, K, N

- **Integrate the various staffing components into a unified management structure for the program.** Currently, the project management, grant management, project and financial controls and procurement functions are not well coordinated, creating gaps in communication and preventing efficient processes. Staff in some of these components do not report up to the same managers, creating divided loyalties rather than a cohesive team. A recommended program structure includes a Program Administrator and deputies with subject matter expertise in each of the component areas reporting to the Program Administrator, and they and their staff be dedicated full time and exclusively to the JIRR implementation program. This management structure should also very clearly include and fully integrate the Sewerage and Water Board staff assigned to JIRR.
- **Dedicate staff exclusively to the JIRR.** This will create ownership of the program among the individuals selected to be involved with the JIRR team, simplify the accounting of project management and administrative costs associated with managing the program, and create clarity of staff roles by separating out non-JIRR functions.
- **Dedicate a physical space to the program.** If possible, co-locate all staff that are dedicated to the JIRR in the same workspace to function as a single unit. This will reduce communication challenges and eliminate the difficulty of accounting for the reimbursement of physical assets and supplies associated with the JIRR. Ideally, this space would also include spots for Sewerage and Water Board employees dedicated to the JIRR.
- **Build the capacity of the program by strengthening adherence to systems.** Current standards, protocols and checklists are sound but not being followed or enforced faithfully. Most of the City staff are talented and dedicated, but struggle in the current management environment because they lack visibility on, coordination with, and understanding of the multiple components of the projects.

2

Treat the processes and systems as a program**Report sections: A, B, C, K, N**

- **The funding is flexible and recipient project scopes can be changed to meet the City's priorities and needs.** The City is currently using the project donor scopes developed by FEMA to justify the fixed cost estimate for the settlement rather than focusing on its own needs and priorities. For instance, in our opinion, this funding can be used to address infrastructure that was NOT damaged in Hurricane Katrina but needs to be repaired or replaced due to age or for other reasons. The funding can also be used to conduct any additional assessment needed to develop these priorities, including fully identifying City-wide drain line cracks or failures. The only exception to this is related to the Arbitration requirements related to a certain number of ADA ramps.
- **The funding is time-bound but demonstrated progress will bolster requests for extensions.** FEMA extended the work deadline for the JIRR program projects through June 30, 2023 as established per PW 21032, 21033 (DAC) and 20908 (ADA). FEMA acknowledges an extended schedule to 2025 based on schedules established during the formulation of PW 21032 and anticipates time extensions will be required to complete the work.
- **Develop and enforce rigorous Force Account Labor (FAL) time-tracking and time recording practices.** The current FAL accounting appears to be inaccurate and lagging many months behind accruals, making the assessment of current spending and forecasting future needs very difficult, and leaving the City to cover millions of dollars of loaded FAL labor costs from the general fund. In addition, the means for tracking personnel time based on actual services provided and including needed supporting notes to ensure reimbursement should be reviewed and improved upon as needed. Actual time billed should be consistent with actual services provided and time spent.
- **Accelerate project delivery to match the rate of project management and administrative costs.** The current burn rate of project management costs appears to be running too high relative to the rate of project design and construction to make the program sustainable over the long-term. An improved program structure and set of systems are needed to balance this ratio appropriately.
- **Current Standards of Procedures are sound, thorough, and all key components of the JIRR are captured.** It is recommended to simplify the SOP by including key sample documents, checklists, and flowcharts as appendices or attachments.
- **Reinstitute personnel training and conduct sessions for identified topics.** It is recommended the City consider reengaging outside consultant assistance to host training sessions for topics where personnel experience may be lacking or specifically geared to improve personnel time and productivity and understand current project delivery, industry standards, and other stakeholder requirements and guidelines based on the ongoing and upcoming projects.
- **Current reporting capabilities are excellent.** It is recommended, however, that the reports be modified to provide a more concise narrative and trend-tracking for the City and the public to monitor progress.
- **Monthly and quarterly reporting can be modified to be more effective.** While current reporting capabilities are strong, several revisions to the reporting format and content can greatly improve the effectiveness of the reports.

3

Treat the scope of work as a program

Report sections: G, H, I, J, L, M

- **Continue projects currently in design (Waves 1 and 2), but revisit and reformulate the scope of future projects.** This would allow the scope of future projects to meet the City's highest priorities and greatest needs and to be aligned with the city-wide stormwater model as well as any new complete streets, green infrastructure design requirements, and the bicycle Master Plan that is still in development. Additionally, consider completing any and all assessment work for underground utilities to identify all unknown damages/problems as soon as possible, and ensure that any and all planned SWB underground utility scope is performed prior to any pavement repairs.
- **Fully assess City's infrastructure needs in order to reformulate and rescope future projects.** The assessment work itself, such as CCTV'ing the City drain lines, not only can be funded via the JIRR PW using the flexibility of the recipient scope, but it is also a prudent use of funding.
- **Increase the construction industry's opportunity and willingness to participate.** Many firms in the design and construction industries have expressed skepticism that the City will be able to scale up the JIRR implementation under its current structure. There is also an expressed reluctance to participate because of concern that the lack of timely funding and payments will impact contractors' business operations and be especially detrimental to the small business and DBE community. Engaging the industry proactively, understanding the business aspects of a large-scale capital program from vendors' perspectives, scaling the scope, and modifying bid sizes to address these concerns could be a key part of the overall program's success.
- **Resilient design features can be integrated into the design process of future projects.** Since the funding for the scope of work is flexible, the City can require design consultants to incorporate design features for green infrastructure and complete streets during the design process for those projects that have not yet begun or are still in the early stages of design. However, the City should concurrently work to adopt official policies and procedures to formalize and institutionalize how DPW incorporates these design standards for all work, including FEMA-funded work. Several policy and design tools are recommended to integrate resilient practices.
- **Close coordination with the Sewerage and Water Board is critical to success.** Explore ways to improve coordination and cross utilization of City and SWB personnel, essentially forming a JIRR team that includes SWB and City staff. This effort should also consider co-location of staff and standardization of documentation and processes across the organizations.

All of these recommendations are discussed in detail in the pages of this report and many have very specific supporting action items that the City can consider for action in the immediate and short-term. Managing a program of this size and complexity is extremely difficult let alone making substantial and concurrent programmatic changes, but there are many solutions contained herein that the City can use to chart a course to success in implementing the JIRR.

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SCOPE ITEM A.

Evaluate the funding constraints and issues (i.e. if/why contractors and consultants are not getting paid, issues with reimbursements by GOHSEP, alignment of design scope of grant requirements, etc.)

**HOW THIS TASK WAS COMPLETED:**

This task was completed by reviewing Project Worksheets 21032 and supporting documentation; reviewing other relative correspondence documents; interviewing project managers, grant management staff, and GOSHEP leadership and team leads; reviewing DPW and PDU process documents; and performing a comparative analysis of design basic service fees relative to actual and estimated construction costs.

FINDINGS:**EDUCATION/RE-INTRODUCTION TO PROJECT WORKSHEET 21032:**

Due to transition of leadership, the complexity of the FEMA Public Assistance Program, the development of the SRIA legislation and Alternative Procedures program, layers of contributing data and history related to the formulation of Project Worksheet (PW) 21032, it has become evident that educating or re-informing high and mid-level leadership on the details, constraints, and possibilities related to implementing the work in this grant, and specifically in accordance with the advantageous benefits of Section 428 of the Stafford Act which is necessary to establish a cohesive coordinated understanding necessary for effective, efficient, and a maximized implementation of this program.

There are 3 primary areas of constraint of the grant: funding, scope, and timeline.

This assessment focused on how the JIRR Program is currently performing in respect to the three constraint areas: funding, scope, and regulated timeline.

PW 21032 GRANT CONSTRAINTS INCLUDE:**I. FUNDING:**

Funding is capped at the fixed cost estimate agreement per the stipulations set forth by participation in the Public Assistance (PA) Alternative Procedures Pilot Program for Permanent Work. No funding will be added or deducted apart from gross negligence or extreme noncompliance, thus funding constraint is ultimately influenced by the following activities:

- Procurement compliance/cost reasonableness
- Funding source tracking and coordination
- Reimbursement request packaging and supporting documentation efficiencies
- Closeout preparation

SCOPE ITEM A.



Compliance with Federal procurement procedures is paramount to the success of implementing this work, which includes demonstrating cost reasonableness of activities. Demonstrating acceptable procurement activities involves the necessary supporting documentation to verify compliance with Federal regulation. Thorough, adequate, and accessible documentation is the life line to funding the work in a timely manner, the importance of which cannot be stressed enough. However, procurement compliance goes beyond the documentation support, it requires the establishment of acceptable practices and buy-in from the Grantee on methods utilized. The following findings were documented and examined:

- GOHSEP indicated there are un-resolved cost reasonableness issues related to soft-costs. Although funded through the “Express Pay” system, the relevant reimbursements are being withheld from final review and tagged as pending resolution. It has been discovered this is the result of the methodology used to establish engineering fees for Wave 1 projects.
 - It appears that many projects’ A/E basic services values exceed the reasonable cost relative to the total cost of construction value. This is the reason why GOHSEP has determined some A/E fees are unreasonable. We understand that options for resolution are being worked with GOHSEP but still pending since September 2018.
 - We discovered that Wave 1 projects (prelim design) were paid on a level of effort scale by the CNO, rather than a curve based upon the construction value. Then at final design, the A/E contract was amended to include 20% of the fee against the curve.
- GOHSEP expressed concern related the lack of access to supporting documentation and the response timeliness on document requests.
- Project Managers indicated that they are responsible for uploading documents to SharePoint, including invoices, plans, submittals, etc. They indicated there is no DPW personnel dedicated to document control. We did not determine if anyone provides oversight concerning the accuracy, and extent of documents required to be recorded.
- We understand that the PDU team manages the closeout file for each project. We understand the PDU either pulls required documents from SharePoint or requests specific documents from individual project managers. Although we anticipate some level of coordination between PDU and DPW does exist, we did not determine the extent of coordination regarding required records and document protocols beyond what was described.

SCOPE ITEM A.

- It was discovered there is a tracking mechanism that a project manager signs off on to validate an invoice shall be approved and includes the appropriate back-up for routing. Missing documentation may not be discovered until the PDU is processing or has submitted a reimbursement request. Typically, getting documents from Contractors after too much time has passed may not be possible, can be challenging, and creates delay.
- GOHSEP described the inefficiency when the DRS is required to research ADA ramp locations as part of their review and indicated that more descriptive directional orientation could assist this effort and reduce review times.

II. SCOPE:

Review of the PWs and supporting documents have provided insight that there is broad scope flexibility albeit within the “proposed use” and “conceptual scope” identified within the narrative of the grant. While the primary scope constraints include, determined location (City right of way), and compliance with environmental and historic preservation (EHP) regulations, PW 21032 states, **“the consolidated subgrant may restore the pre-disaster condition, function, and capacity of some or all of the separate sites or facilities contained within the consolidated subgrant, or it may reflect a fundamentally different concept.”**

Based on review of completed scope, designed scope pending completion and documented future conceptual project waves, it appears that the scope of work has been developed tightly aligned with the previous City’s donor PW scope of work framework in combination with Sewage and Water Board (SWB) PW donor scope of work framework. This conclusion was based on discussion with project managers and observations that the City references the donor PW number when submitting new project scope review request packages to FEMA and FEMA PA review comments reference donor PW project dimensions and values when reviewing scope packages.

Our evaluation questions how much the scope must conform to the values, dimensions, and parameters from the contributing project PWs which were used to conclude the fixed cost estimate, as opposed to the City implementing the JIRR program with broader flexibility as outlined in PW 21032, while remaining attentive to the mandated provisions identified in compliance with the ADA Curb Ramp Arbitration Agreement (CBCA 3344), and with Federal regulation, and all requirements under Section 428.

While it appears prudent for the City to repair identified damages per neighborhood which established the basis for the consolidated fixed cost subaward as well utilize previous design scope, it became clear that FEMA Public Assistance review staff holds the City responsible for completing the scope in accordance with repair methodologies and values developed by FEMA. Yet, there is no reference to such requirements within PW21032.

FEMA’s primary scope review responsibility is precisely described in PW213032 and remains specific to EHP concerns.

SCOPE ITEM A.

**III. PERIOD OF PERFORMANCE/WORK DEADLINE:**

Time limitation for completion of the work is Federally regulated. The constraint is that the funding is a product of the timely completion of the work within the period of performance FEMA establishes. Consequentially, the funding can be limited to costs incurred only up to the latest approved completion date. FEMA extended the work deadline for the JIRR program projects through June 30, 2023 as established per PW 21032. FEMA acknowledges an extended schedule to 2025 based on schedules established during the formulation of PW 21032 and anticipates time extensions will be required to complete the work under the PW.

The subgrantee is advised work must be completed within established regulatory timeframes and request time extensions as appropriate, a time extension is being provided for the consolidated subgrant through June 30, 2023. FEMA recognizes the schedule for completion of projects extends through 2025 (attachment 2) and that it may be necessary for the CNO to request additional time extensions to complete the work under this PW.

Regardless of FEMA's anticipation of work performance beyond 2025, there appears to be consensus or a collective perception that very little progress has occurred. FEMA/GOHSEP did not mandate how progress will be measured, though it is clear that number of projects in construction and completion of projects are the driving factors of consideration. The recovery partners have expressed concern the not enough work has been completed and the JIRR program cannot be implemented to completion by 2023, or 2025. This perception spreads doubt which inhibits support from partners. The lack of progress has diminished the City's credibility in the eyes of the contracting community generating concern and distrust in the City's ability to fairly implement the work. This further dampens the availability of qualified contractors willing to participate in the project which will compound delay and further stall progress.

There is an urgency for the City to demonstrate progress through logical and sustainable project delivery, to maintain the support of the recovery partners, specifically those with the authority to influence the mandated work deadline when the time arrives.

SCOPE ITEM A.

RECOMMENDATIONS:

We recommend leadership and the project management team become more informed on Public Assistance (PA) policy relevant to the JIRR, the provisions and nuances of the grant (PW 21032 and PW 21031) highlighting the scope flexibility, the importance of procurement practices and document control, to garner confidence in implementing the scope necessary instead of relying on FEMA to guide the team through scope development and design.

FUNDING:

- Procurement practices should be examined and aligned to support a “program” mind set versus “project to project” mind set
- DPW/PMs should be informed of the “dos and don’ts” related to establishing and justifying design fees.
- Have dedicated fiscal staff sitting in the DPW to help review invoices for accuracy, verify funding is in place, (in comparison to budget,) etc.
- Establish ADA ramp locations graphic/coordinates/directional orientation description which could assist GOSHSEP/DRS review and reduce review times and improve reimbursement efficiency.
- The DPW should vet with GOHSEP an acceptable methodology for awarding design fees. On previous recovery projects the City, FEMA and GOHSEP have agreed that it was acceptable to set fees by using the fee formula established by the State of Louisiana Facility Planning and Controls Department. Although various methods exist, typically design fees are established as a percentage of the budgeted amount of available funds for construction (AFC) and then aligned with the final design opinion of probable cost (OPC) prior to bid. Where the OPC should not dramatically skew from the available funds budgeted. This method requires more accurate project estimates on the front end. The City’s historical cost data should lend to the ability to establish relatively accurate budgets.

pc

SCOPE:

- Eliminate the mindset of exactly matching the scope to the scope and repair methods used to formulate the fixed estimated cost and re-examine design requirements of program projects to better meet the needs of the City’s infrastructure and establish cost efficiencies for the projects and program.
- The City should determine its overall infrastructure priorities by developing a criteria for prioritization. The City has approximately \$5B in roads and sub-surface infrastructure work to do to fix all failing

SCOPE ITEM A.

components, and the JIRR only funds \$2B; therefore, the City must prioritize to determine the best and highest use of the initial \$2B in projects. This is essentially developing a “Master Plan” the City can follow not only for the execution of the remaining JIRR funding, but also lays a road map out for potential Bond work.

- Recognize FEMA’s role in compliance oversight during the design phase of projects is limited to oversight of environmental and historic compliance and oversight of ADA ramp arbitration scope implementation. Limit input and recommendation on scope revisions not related to EHP concerns.
- While prudent to utilize the framework established by the previous reports, especially those identifying sub-surface utility issues, utilize the flexibility of the grant to better prioritize the work and meet the needs of the City’s infrastructure, including addition of resiliency/green infrastructure measures
- Seek and incorporate public input in the development of a roads/ utilities Master Plan in order to foster community buy-in and address NEPA environmental justice issues.

PERIOD OF PERFORMANCE/ WORK DEADLINE:

- Establish a *program* master schedule. *PC*
- Develop a logical and realistic look at program schedule, examine more proportional ramp-up of program.
- Incorporate the capacity of the contracting community and align project schedules with what the market can withstand.
- Provide construction market outreach to build better relationships and more confidence in the program.

SCOPE ITEM B.

Assess the management costs (FAL and contracted) spent against the JIRR and how much PM and COI/DAC funding is available to manage the remainder of the program.



HOW THIS TASK WAS COMPLETED:

This task was completed by conducting PDU and DPW staff interviews to determine the systems and processes used to track Project Management (PM) and Close-Out Incentive (COI)/Direct Administrative Costs (DAC) costs, and obtaining comprehensive reports from the various resources. The reports reviewed include (1) the **City’s Original Projection** produced in 2016, (2) **ADP** which, along with the City’s Original Projection, assumes 100% of employee’s time is dedicated to the JIRR, (3) **Time Clock Plus (TCP)** which uses actual time billed towards the JIRR as input by employees, (4) **LAPA PM and COI/DAC Reimbursement Submittals to Date** which provides actual and reimbursed PM and COI/DAC costs, and (5) **Invoices from outside professionals with PM or COI/DAC costs against the JIRR** from Jacobs/CSRS and CSRS/H Davis Cole.

These reports were compared and analyzed to identify how much PM and COI/DAC has been expended against the JIRR to date. A full description of the reports and assumptions can be found at the end of this section.

FINDINGS:

1. **Based on the information gathered, it was not possible to determine the exact amount of PM and COI/DAC spent against the JIRR to date.** The table below compares the results from the reports, discussed above, between July 2016 thru December 2018:

Task Code	CNO Projection	ADP Actuals*	TCP Actuals*	LAPA Actuals
PM	\$ 15,874,674.00	\$ 11,798,096.68	\$ 6,913,678.22	\$ -
DAC	\$ 6,878,882.08	\$ 3,093,687.04	\$ 1,916,287.96	\$ 104,244.35
IAC	\$ 878,512.50	\$ 99,364.51	\$ 14,085.43	n/a
TOTAL	\$ 23,632,068.58	\$ 14,991,148.23	\$ 8,844,081.60	\$ 104,244.35

*For the purposes of this report, the total invoiced towards the JIRR by outside consultants (Jacobs/CSRS and CSRS/H Davis Cole) is included in these numbers.

SCOPE ITEM B.

With the ADP report applying 100% of the employee’s time towards the JIRR, and since only \$104,244.35 in COI/DAC costs and \$0 in PM costs have been submitted to LAPA to date (detailed in Finding 2, below), the closest estimate to use for total spent towards the JIRR to date would be from TCP. However, the following needs to be considered:

- a) **Missing/Late Timecards** – Several employees expressed that the number one issue preventing the PDU from having accurate costs to date for PM and COI/DAC was due to late timecard submissions. As of 1/11/2019, the total number of JIRR employees with late timecards is 64:

Days Behind as of 1/11/2019	JIRR Employees	Non-JIRR Employees	All Employees
Less than 2 weeks	7	4	11
2 weeks - 30 days	16	7	23
31 - 60 days	18	1	19
61 - 100 days	11	7	18
101 - 200 days	8	4	12
200+ days	4	1	5
Total Employees 1+ days behind	64	24	88

The TCP administrator continuously follows up with employees that are missing timecards but has no authority to require timesheet submissions. **There are no repercussions for late time card submittals in TCP.**

- b) **Inaccurate Timecard Reporting** – Employees with late timecard submissions must input timecards that are weeks and sometimes months past due, requiring them to estimate their hours and tasks performed on JIRR projects. If timecards are not completed on at least a weekly basis, it is extremely difficult for the employee to accurately reflect how they spent their time.
- c) **The amount being billed to PM is potentially inflated** – Some PMs and other JIRR staff appear to have been billing all or most of their time towards the JIRR even when time was potentially spent on non-JIRR projects.
- d) **Inaccurate Wage and Benefit Rate Information in TCP** – When comparing the two employees that have been submitted under the COI/DAC PW for reimbursement (table below), their total billed towards the JIRR in TCP is 16% lower than the total submitted in LAPA over the exact same time period:

Employee	Period <i>(based on RRF back-up)</i>	LAPA		TCP – DAC Codes Only		Delta
		Hours	Cost	Hours	Cost	
1	12/16/2016 - 8/2/2018	707	\$ 46,093.43	707	\$ 42,511.91	\$ 3,581.52
2	12/5/2016 - 8/10/2018	1176	\$ 58,150.92	1234.75	\$ 46,775.54	\$ 11,375.38
TOTAL			\$ 104,244.35		\$ 89,287.45	\$ 14,956.90

SCOPE ITEM B.

The main reason for the discrepancy shown above is the wage + benefit rates in TCP not matching the rates used in the reimbursement request. The table below shows the wage + benefit rate used in the reimbursement request, which changes over time due to benefit rate changes and wage increases, as compared to the wage + benefit rate used in TCP over the same 2016 – 2018 time period.

Employee	Wage + Benefit Rate Comparison	
1	LAPA = \$59.99, \$66.26, \$67.37 & \$67.92	TCP = \$60.13
2	LAPA = \$31.43, \$32.22 & \$35.58	TCP = \$36.27 & \$53.66

- e) **TCP has only been scrubbed through September 2017** – due to missing timecards and extreme level of effort needed to validate timecard and wage information, TCP has only been verified through September 2017. However, upon further review, even the data that has been validated is reporting different wage/benefit rates than what is ultimately submitted to GOHSEP, as evident by the comparison shown above.
2. The **lengthy and manual process required to submit a complete reimbursement package** to GOHSEP for PM and COI/DAC results in the inability to quickly calculate current expenditures against the JIRR and has caused extreme delays in the City being reimbursed for those costs. **Only one reimbursement request has been submitted for FAL COI/DAC costs in the amount of \$104K, and no FAL PM costs or consultant PM or COI/DAC costs have been submitted for reimbursement.**
 - a) While reports can be pulled and somewhat customized from TCP, the database cannot produce a reimbursement request ready report. This results in extensive manual work and report manipulation to produce a GOHSEP ready reimbursement request.
 - b) A large, tedious effort is needed to manually compare TCP with ADP to validate time reported by each individual employee (example, employees billing time to a project on the same day where in ADP they requested time off)
 - c) A manual review of projects billed by each employee is performed to verify they are billing to correct and active projects (example, billing to a closed project)
 - d) Several employees expressed that inputting time by project in TCP is extremely time consuming and cumbersome, discouraging employees from inputting time.
 - e) Consultant invoices do not go through the same lengthy process and FAL reimbursements and therefore, the consultant invoices can be submitted for reimbursement as soon as the invoices are approved.
 3. **The allowable PM rate for the JIRR is not clear in the PW.**
 - a) Reviewing the language in the PW, it appears that the eligible PM under the JIRR is 6% of the construction costs, or \$62.3M. This was calculated by multiplying the \$906M in construction costs of the settlement by 6% and adding the \$8M in PM costs transferred from donor PWs.
 - b) According to PDU management, both FEMA and GOHSEP verbally agreed during several meetings that PM could reach as high as 12% without GOHSEP questioning the reimbursement. During these same meetings, \$82M was discussed as a reasonable PM amount. This was calculated by taking the full \$1.4B PW amount, subtracting \$22M in soft costs, and multiplying that by 6%. However, since these discussions do not appear to have been documented in writing, it is unlikely this will be honored when full project reconciliation is performed at the end of the program (in the 2023-2025 time frame).

SCOPE ITEM B.

**RECOMMENDATIONS:**

1. **Assign staff to focus on FAL reimbursement requests to catch-up on backlog.**
 - a) As reimbursement requests are finalized, validate the information matches TCP and update TCP when necessary (see Recommendation 2, below).
 - b) Once caught up, begin submitting FAL reimbursement requests on a quarterly basis, eventually adjusting down to a monthly basis, once able.
 - i. Consider assigning a staff member to start on current submissions (2019 forward) while additional staff address the back-log.
 - c) **Submit the approved consultant invoices for Jacobs/CSRS and CSRS/H Davis Cole for PM and COI/DAC reimbursement.**
2. In the short term and for historical records, reconcile TCP and use this system as the official PM and COI/DAC reporting tool.
 - a) Aggressively address the missing and late timecards.
 - i. To eliminate the current backlog of late timecards in TCP, allow users to **input time spent on JIRR projects to one JIRR code** instead of by project. Once TCP is up to date, continue to require users to track time by project. It is nearly impossible for employees to go back and recall how much time and what task they performed on each individual project, let alone JIRR vs non-JIRR. Lifting this requirement short term could help the City get back on track and start with a clean slate.
 - ii. **Require timesheets to be input by Friday of every week.** Send weekly emails to JIRR staff that are behind on their timecards and copy the team leads. Monthly, copy the department leads. Require late submitters to schedule time in their calendar for timecard catch-up and have a PDU representative check-in during that time.
 - iii. **Empower the Department Leads, Managers, and Team Leads to hold their staff accountable for late timecards.**
 - b) Update the wage and benefit rates in TCP to match the rates used in reimbursement requests.
 - i. Develop a systematic approach to reconcile TCP to match the hours in ADP and the wage and benefit rates used in reimbursement requests.

SCOPE ITEM B.

- ii. Train the TCP administrator(s) on how the wage and benefit rates are calculated on reimbursement requests. **The wage and benefit rates in TCP need to match the wage and benefit rates used in reimbursement requests.** Matching the wage and benefit rates will provide management with more accurate reports as to what has been spent against the JIRR to date and will help expedite the reimbursement request submittal process by correcting this information on the front end.
 - iii. Determine a frequency on how often the wage and benefit rate information should be verified and updated in TCP. Begin quarterly but gradually move to monthly once the administrator (or assigned staff member) has the capacity to do so.
 - iv. Apply the same frequency to validating TCP hours against ADP.
- c) Once the data in TCP has been validated and more real time information can be provided, **create a monthly report for upper management** with how much PM and COI/DAC has been spent to date, what's been submitted for reimbursement, and what's been reimbursed. Include projections and burn rates that managers can use to make necessary staffing adjustments as needed.
- 3) **Long term, eliminate TCP and merge the FEMA time tracking requirements to either ADP or the new ERP system with up to date and accurate wage and benefit rates.** By doing so, only one timecard input is required by each employee which should limit the late submissions, eliminate discrepancies including incorrect wage and benefit rate information, and eliminate the need for manual comparisons between multiple systems. This is a current goal mentioned by several PDU staff and managers.
- a) Include the ability to generate a report for upper management and a detailed report/list that is reimbursement request ready.
- 4) **Only time spent on the JIRR should be billed towards the JIRR.** Consider dedicating staff exclusively to JIRR.
- a) Require users to input comments on timecards as FEMA requires and has a right to request secondary comments at any time.
- 5) **Request FEMA/GOHSEP provide, in writing, verbally agreed to policies and understandings including:**
- a) The agreed upon allowable PM rate per the JIRR PW, discussed in previous meetings with FEMA and GOHSEP
 - b) A waiver stating that all COI/DAC codes are allowable under the JIRR.



SCOPE ITEM B.

CJ024

REPORT DESCRIPTIONS:

For the purposes of this assessment, all reports were adjusted to cover the time period of July 2016 – December 2018.

The City's Original Projection

- Produced in 2016 by leadership from PDU and DPW
- Calculated by estimating the number of positions needed, multiplying the average salary per position plus an estimated 30% benefit rate, and applying 100% of the costs towards the JIRR.
- The projection also includes an estimated amount for outside professional/consultant fees.

ADP

- Using the positions listed in the projection report as a starting point and assigning positions to current staff, this report calculates the actual costs incurred by employee to date by using timecard, wage, and benefit rate information from ADP.
- Assumes 100% of employee's time (minus holidays and leave) is billed to the JIRR.
- For the purposes of this analysis, the contractor invoiced amounts were added to the ADP and TCP actuals reflected in the table on page 12.
- This, along with the projection, is considered the "worst case scenario" approach as both reports assume 100% bill rate towards the JIRR.
- Note that the ADP amount shown below is low as it's missing costs for four new hires in 2018 due to an ADP error. It was not able to be resolved within the timeframe of this task order.

Time Clock Plus (TCP)

- Uses actual time billed towards the JIRR as input by employees.
- According to various sources, TCP has been fully scrubbed through September 2017. Any costs after that date could experience "a 25% variance" due to missing timecards, corrections to timecards, adjustments to wages and benefit rates, and general clean-up.
- For the purposes of this report, the total invoiced towards the JIRR by outside consultants was added to the TCP totals in the table on page 12.

LAPA PM and COI/DAC**Reimbursement Submittals to Date**

- As these are actual, finalized reimbursement requests submitted to GOHSEP, this would be considered the most accurate way to determine how much PM and COI/DAC has been spent to date.
- However, due to the extensive amount of clean-up and time needed to make TCP reports ready for GOHSEP reimbursement, only \$104,244.35 in COI/DAC and \$0 in PM costs have been fully submitted for reimbursement in LAPA.
- Due to the low value, this cannot be used to determine total PM or COI/DAC spent to date.

Invoices from outside professionals with PM or COI/DAC costs against the JIRR

- The only consultants that have billed to the JIRR is Jacobs/CSRS in 2016 and CSRS/H Davis Cole in 2018. The total billed towards the JIRR for both entities is \$748,147.05 in PM and \$25,019.17 in COI/DAC.
- For the purposes of this analysis, the contractor invoiced amounts were added to the ADP and TCP actuals reflected in the table on page 12.

SCOPE ITEM C.

Forecast management costs through projected burn rate analysis based on recommended program delivery model.

HOW THIS TASK WAS COMPLETED:

After conducting a detailed analysis of PDU and DPW staff assignments, work-loads and time-accountability, and current program delivery model, the team faced significant challenges in determining an accurate PM/DAC burn-rate given the currently available data and therefore it is impossible to forecast a position-specific staffing model.

Assuming the corrective actions recommend in section B will be implemented, the JIRR program should realize PM/DAC cost savings over the course of construction that will hopefully balance-out the significant management costs already incurred on the front-end of the program and a true and updated staffing forecast can then be developed.

FINDINGS:

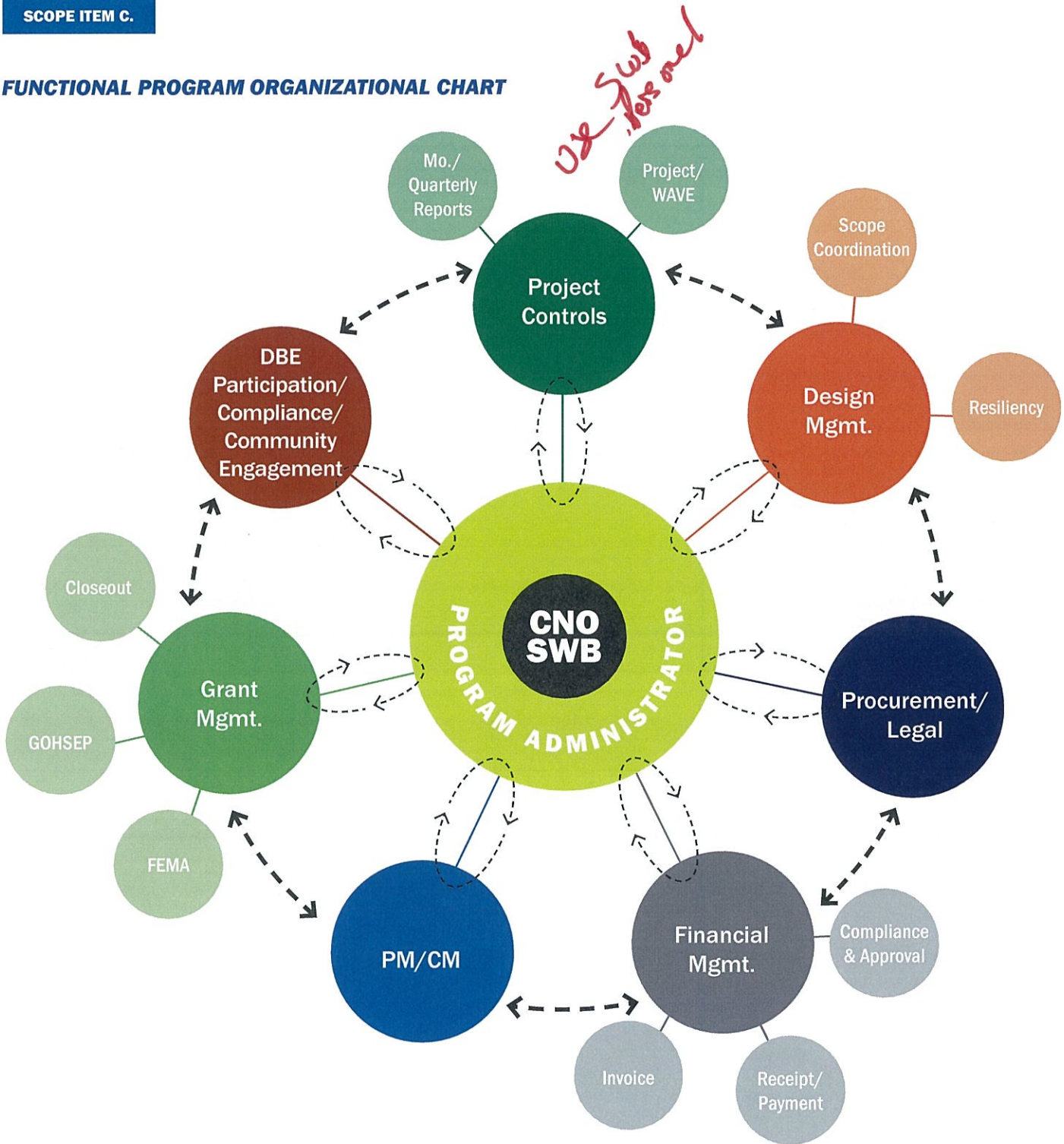
- By treating the JIRR program as a collection of individual projects as opposed to a holistic program, CNO is not maximizing the available economies of scale.
- Current timekeeping systems do not accurately segregate JIRR work/tasks performed from other non-eligible work.
- Based on analysis of CNO Projections and Actuals from ADP and Time Clock Plus (TCP) reports, findings show the amount of PM/DAC/IAC expended to date far exceed the agreed to percentages.
- Current project schedules/controls are not cost-loaded, and as such do not provide for proper cost alignment.
- Given the underlying lack of baseline program data and the challenges CNO will likely face adhering to the aggressive project roll-out schedule (outlined in later sections), any burn-rate forecast prepared at this time would simply be a best-guess, and as such not tied to any factual data.

RECOMMENDATIONS:

- Establish a JIRR Program Office run by a Program Administrator with decision making authority to direct all activities related to JIRR, that may currently reside in DPW, PDU, Finance, Legal, or the Procurement Departments.
- Program Administrator should be required to create and maintain a Master Schedule that is resource loaded with the responsible PM of record and a forecasted time for construction/PM value associated with the individual project.
- The master schedule should also estimate the project milestones including closeout. Currently, DPW does maintain a P6 schedule on the project with Milestones which does not include resource loading or projecting cost lines by scope bucket.
- Ensure active monitoring of PM, DAC and IAC usage percentages in relation to actual eligible JIRR construction costs.
- While estimated program management costs could be gathered from current budget estimates, it is recommended CNO develop a PM COI/DAC forecast, based on a realigned project schedule and delivery model that factors in the additional recommendations contained in this report and be revisited on a quarterly basis based on reconciled actual completed project costs.

SCOPE ITEM C.

FUNCTIONAL PROGRAM ORGANIZATIONAL CHART



These are not different departments; They are the functions of one program, which report to the Program Administrator.

SCOPE ITEM C.**PROPOSED KEY STAFF POSITIONS FOR PROGRAM MANAGEMENT STRUCTURE:**

The JIRR program leadership team will be comprised of a single Program Director and 7 Deputy Directors who will function as department heads in the functional areas outlined below.

PROGRAM ADMINISTRATOR

The Program Director will be the single point of contact for CNO and will supervise and coordinate day-to-day program operations with the 7 deputy directors in their respective functional areas of work.

PROJECT CONTROLS

Project Controls unit will track all program status functions down to and including individual projects. This department will also compile and distribute monthly reports (for internal team coordination and problem resolution) as well as quarterly reports outlining the status of the overall program, individual projects and compliance with FEMA & GOHSEP policies and procedures. ✓

DESIGN MANAGEMENT/RESILIENCY

Design Management/Resiliency Implementation unit will coordinate and review all drawings based on agreed to schedules and provide coordination with on scopes of work/design with SWBNO.

PROCUREMENT/LEGAL

In coordination with the City's Procurement Office, the Procurement/Legal team will be responsible for all bid/procurement and contract compliance functions, including project advertisements, facilitating pre-bid meetings, communicating with non-responsive/non-responsible bidders and resolving any/all legal issues between CNO and JIRR contractors. This group is also responsible for ensuring the JIRR program remains in compliance with all CNO procurement requirements.

MWDBE OUTREACH AND INCLUSION

MWDBE outreach and inclusion team will be responsible for ensuring all pre-determined DBE requirements are met prior to contract award, and that all contractors remain in compliance for the life of the contract. The team will also regularly engage with the Design and Procurement teams to develop innovative solutions aimed at increasing DBE participation. This team will also engage with the public as needed to ensure public comment and NEPA environmental justice issues are addressed.

PROJECT & CONSTRUCTION MANAGEMENT

Project/Construction Management (PM/CM) Deputy will be responsible for overseeing all project management functions including billing, financial management (invoicing review and approval), close out, etc. This deputy will also determine when additional staff is required. He/she will also be responsible for development of a mentorship program for project managers who may require additional training to perform at his/her best.

GRANTS MANAGEMENT

Grants Management Deputy will work with GOHSEP and FEMA to ensure that all funding/payment requests, FEMA Project Worksheet amendments and versions, and all other requested documentation are complete and submitted in a timely manner. This department is also responsible for retrieval, retention and submission of all FEMA closeout documentation.

FINANCIAL MANAGEMENT

Financial Management Group will be responsible for all invoice processing to ensure proper routing and approval, including documentation and/or rejection of invoices when necessary. This group will also be responsible for weekly financial reporting, on vendor invoices submitted for payment, as well as submittals to GOHSEP for reimbursement, in concert with Grant Management.

SCOPE ITEM D.

Assess FAL manpower capabilities and alignment (who is doing what, who is getting mentored/trained, if people are in the right spots, where holes exist, etc.)

HOW THIS TASK WAS COMPLETED:

We conducted interviews with DPW management, project managers, and team leads, SWBNO's PDU Manager, as well as PDU middle management leadership and staff members. We also reviewed various process documents (checklists, templates, etc.), reports, sample coordination emails (internal and external), and work coordination review packages submitted to FEMA.

ROLES AND RESPONSIBILITIES OBSERVED:

1. DPW Project Managers and Team Leads are involved with managing JIRR, DOTD, Capital, and Maintenance projects (not JIRR project only). Responsibilities include plan review, document control, plan change and invoice review and approval, and other basic PM tasks. Projects that overlap with SWBNO activities require extensive coordination between the PMs, A/E firms, and contractors.
2. The Project Controls team includes a scheduler, GIS specialists, and a Project Controls manager. They are responsible for maintaining and updating project schedules, meeting all DPW GIS mapping needs, building and maintaining the DPW Dashboard and other reporting tools, producing the Quarterly and Monthly reports as well as ad hoc reports, etc.
3. The Invoice Routing Team embedded in DPW are responsible for initial invoice review, updating invoice statuses in Quickbase, and assisting with the overall invoice routing process.
4. The PDU staff are responsible for JIRR Grant Management, educating contractors on the FEMA invoicing process, grant closeout, cost analysis, funding oversight, and serves as the GOHSEP and FEMA liaison.
5. The PDU staff's reimbursement request team is responsible for verifying invoice eligibility prior to reimbursement submittal, assembly and submittal of reimbursement requests, addressing GOHSEP questions regarding reimbursement submissions, etc.
6. The City EHP/PA review coordinator is responsible for interfacing with DPW regarding all document's transmissions between the two departments, Documents Control, SWBNO, as well as GOHSEP & FEMA.
7. The EHP Staff (Historic Preservation Specialist and Archeologist) is responsible for specific coordination with project managers related to compliance oversight of EHP requirements during scope development and during performance of work. They are intended to specifically liaison with FEMA EHP and GOHSEP staff on EHP project issues that may arise, as well as documenting conditions as required, and routine reporting on the undertaking. Also, they are tasked with developing the treatment measure deliverables mandated by the Accelerated Consultation Procedure (ACP) agreement issued to the City in December of 2018. Submission of the treatment measure deliverables are due 36 months from the date of the agreement.
8. The Time Clock Plus (TCP) Administrator is responsible for maintaining accurate records, updating wage and benefit rate information, identifying and requesting missing timecards, verifying information with ADP, timecard reporting, and assisting PM & COI/DAC reimbursement specialist as needed.

SCOPE ITEM D.

FINDINGS:

1. The departments work independently of one another and lack a feeling of one, unified JIRR program.
2. The Public Assistance policy understanding as it relates to JIRR Project Worksheet 20132 could be strengthened throughout DPW and PDU staff. Specifically, there appears to be a lack of deep understanding of how the City can utilize the funds and, for the PMs, what is and is not considered eligible when dealing with plan changes and other funding issues.
3. The City and A/E's should have full discretion of scope under the JIRR (except for ADA arbitration requirements), however it appears that the City and A/E's are taking scope directions from FEMA.

DPW

1. The JIRR has no clear chain of command and lacks a designated Program Administrator.
 - Many PM's expressed the desire for more direction and a clear path to elevate various issues as they arise.
2. The Chief Engineer assists PMs with design issues; however, he does not appear on the organizational chart and it is unclear if he is part of the final decisions on design issues.
- PA 3. There does not appear to be any document control personnel within DPW.
- BS 4. Several PM's expressed the need for more direction and tools to effectively manage projects:
 - While they are responsible for milestones throughout design and construction, they have no control when the schedule slips since they lack authority over the A/E firms when milestone dates are missed.
 - DPW Specifications do not require a critical path schedule from the Contractor nor do they provide an accurate 2 week look ahead for work planned. Contractors tend to move throughout the limits of the project without proper notification.
 - There is a lack of understanding of roles and responsibilities between departments (e.g. catch basin cleaning, utility work, etc.)
 - The PMs requested assistance and direction with identifying funding sources to fund plan changes, pay invoices and resolve eligibility questions. For example: If City decides to add drainage that did not previously exist, is it eligible?
5. The invoice routing team is knowledgeable and proactive with reviewing and routing invoices within DPW; however, they lack visibility on invoice statuses and issues once routed to the PDU for payment processing. This team also expressed a desire to be included when PDU staff educate contractors on how to submit FEMA invoices, which is usually done during pre-construction meetings.
6. DPW does not appear to have a PA policy expert who can help provide guidance on eligibility during scope development or the design phase.

SCOPE ITEM D.

PDU

1. **The roles and responsibilities for individuals within the PDU are clearly delineated and supported by effective processes, procedures, and clear chain of command.**
2. Besides recent departures, no clear gaps in positions/roles/responsibilities were observed; however, additional staff to support the JIRR as projects ramp up may be necessary.
3. The recent departure of the PM and COI/DAC reimbursement specialist has caused a temporary void in the FAL reconciliation and reimbursement process. With only one FAL reimbursement request submitted, TCP being scrubbed through September 2017, and inaccurate wage and benefit rate information throughout TCP, additional staff may be needed to validate TCP and to submit FAL reimbursement requests.
4. The PDU does not appear to have a PA policy expert that helps guide scope decisions or is involved in design development.
5. **Comprehensive program coordination and aligned quality control standards is lacking.**
 - PDU is lacking authority to impact DPW's quality control over packages developed for submission to FEMA. Although, PDU staff has worked with FEMA to develop acceptable formats for review packages and communicate the package requirements to DPW staff through checklists and cover letter templates, PDU staff must rely on DPW PM staff to accurately implement the format and prepare the review package. Although they manage the product submission, PDU team members do not have the authority to influence the quality of the transmittal documentation. While PDU has a dedicated member to manage this process and provide oversight, it appears that DPW does not.
6. For the Environmental and Historic Preservation (EHP) Staff, a historic preservation specialist and archeologist were recently added to the PDU team. Although they coordinate specifically with project managers on scope development and provide oversight during the work performance, they are managed by and report to PDU management.

which makes no sense →



SCOPE ITEM D.

RECOMMENDATIONS:

1. **Create an atmosphere of one JIRR program:**
 - a) Create a single JIRR organizational chart with clear roles and responsibilities.
 - b) Embed financial controls employee with knowledge of funding set-up, plan changes and invoice processing with the project managers to work alongside the Invoice Routing Team.
 - c) Educate JIRR staff on the JIRR PW SOW and encourage PMs to engage with a (to be determined) JIRR Grants Manager/technical policy expert with eligibility questions and concerns.
2. **Provide PM's with the tools they need to effectively manage their projects**
 - a) **Hire a JIRR Program Administrator with significant PM experience.**
 - b) **Update DPW Specifications** to require a critical path schedule and two week look ahead of planned work from Contractors, thus empowering the PMs to keep Contractors on task.
 - c) Consider re-aligning the PM workload to have PMs that work full time on JIRR projects and PMs that work full time on non-JIRR projects.
 - d) **Provide PM's with a clear interpretation of exactly what is in the JIRR PW and the flexibility they can utilize on the City's behalf as it is stated in the PW.**
 - e) Provide PM's with one Grant closeout checklist and standardize the closeout folders in the shared drive. Assign a PDU closeout specialist to periodically verify closeout documents on active projects and engage PMs when documentation is lacking.
3. **Clearly define roles and responsibilities between the City and FEMA in accordance with the JIRR PW.** The City should be dictating JIRR recipient project scope, not FEMA.
4. Train additional PDU staff to calculate wage and benefit rates of FAL staff in order to update TCP with accurate wage/benefit rate information and expedite the FAL reimbursement process.

SCOPE ITEM E.

Based on staffing evaluation results, recommend training/capacity building approaches and activities.

**HOW THIS TASK WAS COMPLETED:**

In an effort to identify potentially effective training and capacity building approaches and activities, we first observed the specific strengths and weaknesses of JIRR personnel by conducting a series of staff interviews focusing on currently assigned tasks, prior professional experience, and education and certifications.

This assessment was further informed by prior working relationships with City staff working on FEMA funded programs, including time embedded at DPW working directly with CNO and SWB program leaders and project managers.

FINDINGS:

Not unlike many large municipal governments, CNO relies on a departmental peer mentoring model where line-supervisors and department leads are directly responsible for staff training and development. While this type of peer-to-peer mentoring can be highly effective for onboarding and other day-to-day tasks, it generally lacks in the depth of professional knowledge needed to be an effective training method for more complicated topics, such as compliance with FEMA or GOHSEP regulations.

Further, while it was generally found that current staff operate in the most efficient ways possible given the constraints of a program, there were significant gaps in the uniformity of training on several topics, especially those related directly to federal government laws, regulations, and policy.

On lesser levels, knowledge gaps were also identified in areas of procurement, design specification requirements, and the distinctions between program versus project management.

SCOPE ITEM E.

RECOMMENDATIONS:

- Develop an ongoing staff assessment program to identify specific training needs and monitor the delivery and effectiveness of delivered training.
- Review prior training session tools, topics and resources with current personnel to gather staff feedback on quality and effectiveness.
- Provide additional assessment focus on recently hired personnel who may not have directly benefited from prior training sessions.
- Develop and deliver additional training sessions with topics specifically tailored to align with current program priorities.
- Perform quarterly training assessments to inform future training needs as the program progresses.
- Provide on-demand training for any/all significant regulatory changes (FEMA, GOHSEP, Etc.).
- Develop informal “lunch and learn” training sessions on program-appropriate topics suggested by JIRR staff.
- Training topics to be considered for future sessions include:
 - American Disabilities Act (ADA) & ADA Ramp requirements
 - Construction Management
 - *Certified Construction Manager (CCM) courses*
 - *Time Management & Cost Management (CMA)*
 - *Construction Management At-Risk (CMAR)*
 - Roadway Design & Construction requirements
 - *Asphalt Pavement*
 - *Concrete Pavement*
 - *Geogrid & fabrics*
 - Drainage Design & Construction requirements
 - Cost Estimating & Invoice Review
 - Change Order Management
 - Project Safety

SCOPE ITEM F.

Evaluate project status in terms of delivery (stages of design, planning, construction, etc.) and schedules.

HOW THIS TASK WAS COMPLETED:

We reviewed project listings, schedules and project budget spreadsheets; sample FEMA review correspondence including FEMA PA's design review comments; DPW & SBW SOP Coordination Document, revised 2019. We also interviewed DPW leadership and Project Managers.

FINDINGS:**PROJECT ORGANIZATION AND SCHEDULES:**

Project Waves: The JIRR funded projects have been grouped into Project Waves I- IV, with potential Wave V. It was assumed that Project Waves were organized by previous administration, and that consideration was placed on project type, damage urgency, traffic patterns, coordination with SWB, etc. We understand that projects were organized by Council district and neighborhood to minimize the congestion and disruption to an area as well as show progress throughout the city. The City originally anticipated awarding one project per week. It is unclear from the assessment what factors were considered regarding the schedule overlap of Project Waves.

- **Wave I:** 10 of 28 projects are under construction and three are substantially complete and are in construction closeout phase.
- **Wave II:** 46 of 46 pending final design and/or awaiting bidding.
- **Wave III:** 0 of 46 projects in design, no A/E selected.
 - Wave III tasks underway, implemented by new DPW director, include re-examining design contract, general specifications, project general plan notes, and typical sections and details.
- **Wave IV:** 0 of 68 projects in design, no A/E selected

Project Schedules*: DPW stated it intends to award 46 (Wave II) projects by end of 2019. Increasing the active projects to approximately 61 projects in construction during Summer of 2020.

- **Wave I Schedules:** earliest construction started December 2017, latest estimated completion by August 2020.
- **Wave II Schedules:** earliest estimated construction starts July 2019, latest estimated completion April 2021 with majority of Wave II project estimated to be completed by December 2020. Anticipate awarding projects over a 6-month period.
- **Wave III Schedules:** earliest estimated construction starts May 2020, latest estimated completion May 2022, with majority of Wave III projects completed by March 2022.
- **Wave IV Schedules:** earliest estimated construction starts December 2021, latest estimated completion December 2023, with majority of Wave IV projects estimated to be completed by January 2023.

** - These current schedules are based on the current project delivery model and based on the current understanding that scope has to be based on the JIRR donor scope.*

SCOPE ITEM F.

PC



The assessment found that individual project schedules are tracked independently in P6 but understand that all projects are not linked to a master schedule. Project Managers are responsible for milestones through design and construction, however there appears no enforcement of milestone dates, limited oversight of accountability for milestones and limited authority for enforcement of deadlines. Findings indicate that engineers routinely slip on milestone dates.

While Contractors are required to provide a project schedule, what is provided is not a critical path schedule, nor do they provide an accurate 2 week look ahead for work planned. There appears to be no oversight or enforcement in how individual project work is phased or laid-out in individual neighborhoods. Also, it appears there isn't a notification requirement protocol during performance of the work. Contractors move throughout the limits of the project without proper notification.

There does not appear to be a protocol for notifying contractors and associated engineers of the one-year warranty inspection.

A copy of the special provisions of a project was requested to determine how the project managers are interpreting the specifications. Due to time constraints a conclusion was not reached.

It was unclear if project Wave scheduling included considerations for projects anticipated to include more extreme environmental and historical factors which may require a longer duration for FEMA EHP review.

PROJECT BUDGETS, COST ESTIMATES, AND ACTUAL COST RECONCILIATION:

The DPW develops construction project cost budgets for each project based on the following methodology. It is understood these values are derived from the City's historical rates data. These costs include estimated soft costs which are derived from the percentages developed as determined as reasonable in PW21032.

- For full reconstruction (FRC) blocks - \$1400/LF was used to calculate the estimates.
- For patch, mill and overlay (PMO) blocks - \$91/SY was used for asphalt blocks and \$191/SY was used for composite blocks. An additional \$40/SY was also added for mill and overlay (MO) cost. The square yards of pavement restoration for each block was calculated by determining what was originally eligible on the block plus what was later deemed eligible through the scoping phase. MO cost assumed the whole block would receive a MO. If a block had a utility but was

SCOPE ITEM F.

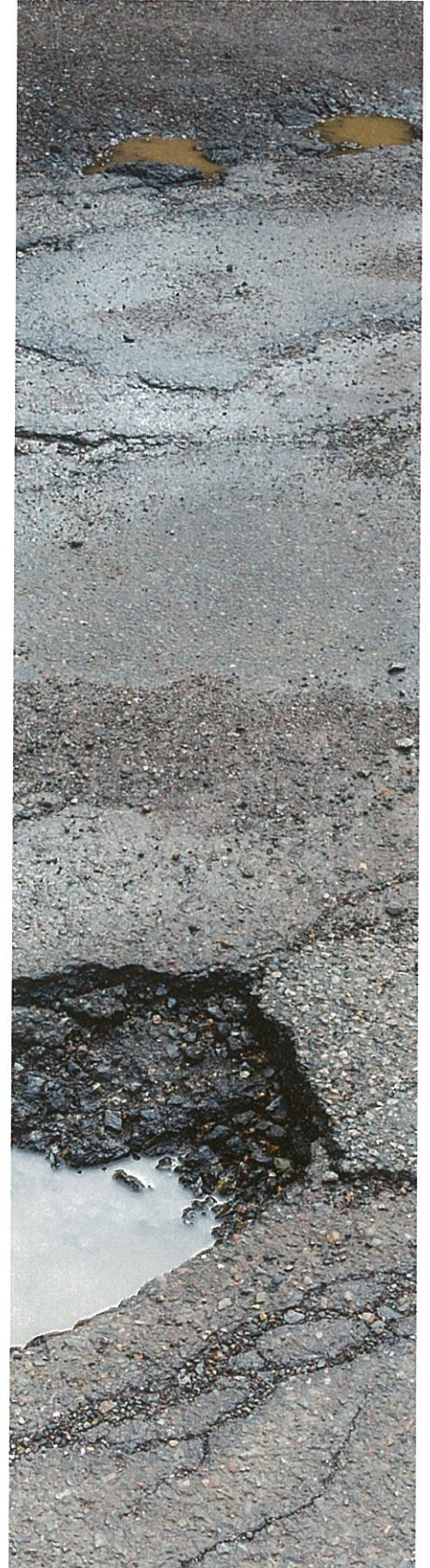
not scoped, square yards were added to account for the main trench and services. All blocks labeled as PMO were given a multiplier of 2 to account for constructability issues.

- For patch concrete (PC) blocks - \$191/SY was used for concrete blocks. Same methods as PMO blocks was used to determine how many square yards in pavement would need to be restored. All blocks labeled as PC were given a multiplier of 4 to account for constructability issues (full panel replacements).
- For incidental (INC) blocks - \$115/SY was used for asphalt, \$215/SY was used for composite and \$195/SY was used for concrete to determine cost on each block. Same methods as PMO blocks was used to determine how many square yards in pavement would need to be restored. All blocks labeled as INC were given a multiplier of 2 for constructability issues.

Based on limited review and discussion, it appears that over the course of implementing the JIRR projects, the DPW has used differing methods for establishing budgets and engineering fees.

The basis of reasonableness for all soft cost fees was established in the formulation of PW21032. The basis for setting engineering fees in PW21032 is the Facility Planning and Control Fee Formula (State Fee Curve).

During the formulation of PW21032, FEMA established reasonable soft costs at 23.3% of construction costs for eligible Phase II road damages, which include engineering services (7.8%), layout (1%), resident inspection (5%), survey (2%), geotechnical investigation (0.8%), materials testing (0.7%) and project management (6%). These soft costs estimates were determined to be reasonable and were based on the results of actual work completed on similar scopes of work in the surrounding area. However, the established percentages are a guide at this point. Actual cost may be reimbursed up the obligated total soft cost funding amount. FEMA acknowledges that actual soft cost associated with individual elements may be either more or less than the estimated percentages.



SCOPE ITEM F.

PC

RECOMMENDATIONS:

- **Develop a Master Program Schedule:** The existing program organization in the form of Project Waves appears to be adequate as an organization method for executing the work over time. The primary recommendation is that the Waves/projects are implemented as a cohesive “program” and not as “individual projects.” The City should implement and track a Program Master Schedule linking all projects with finish-start relationships. This way project elements are resource loaded, as in where one project becomes a predecessor for another project. This tool built-up of many projects’ critical path schedules will in turn re-inform the Program Master Plan (Waves) for a more realistic overview of the undertaking. Benefits could include:
 - More accurate schedule projections informing subsequent Waves, for leadership, recovery partners, and community.
 - Provide data indicating potential need for project reorganization and rescheduling over-time.
 - The ability to discover possibility for early starts, instead of waiting for set dates.
- **Implement a clear methodology for establishing project budgets:** This should be established and communicated to the project managers, along with a method for awarding engineering fees that can be justified as reasonable cost. ✓
- **Certain engineering contracts require reconciliation of associated fees:** It was explained that some of the Wave I engineering contracts were established during Phase II work and then were amended to include Wave I projects. Therefore, the total engineering fee linked to a Wave I project may include Phase II costs. These contracts will require reconciliation to extract and identify the Phase II work from the Wave I work for a more accurate cost reasonableness analysis, support documentation, and tracking. ✓

SCOPE ITEM G.

Evaluate if the “protocol” for determining what work needs to be done is still appropriate.

HOW THIS TASK WAS COMPLETED:

The following documents were reviewed in detail:

- Project Worksheet 21032 and supporting documents (attachments and exhibits)
- FEMA correspondence dated March 30, 2018 related to pending and approved amendment requests regarding omitted “infrastructure construction standards and values”
- City template letter describing FEMA Compliance Checklist, and mandating A/E firms comply with adherence to design provisions identified in the checklist.
- Sample FEMA review correspondence including FEMA PA’s design review comments.
- DPW & SBW SOP Coordination Document, revised 2019
- DPW/SWB Cooperative Endeavor Agreements (CEA) 1992, 2017, and 2019 draft

Also, interviews were conducted with DPW leadership and Project Managers.

FINDINGS:**SCOPE DEVELOPMENT & COORDINATION:**

The Coordination Procedure for the City of New Orleans Department of Public Works and the Sewerage and Water Board of New Orleans (“DPW/SBW SOP”), revised 2019, that outlines the policies and procedures between the two agencies appears to thoroughly address the coordination process and requirements, roles and responsibilities, etc. between the two agencies. In coordination with the provisions of PW21032 and PW21033, the following content is noted for discussion and recommendation:

2019 Revised DPW/SWB SOP page 4 states:

*“When full restoration is triggered by FEMA-obligated scope of work on a block, CNO and SWB maintain the right to replace and restore any utility **at their own expense within the footprint.** [emphasis] SWB will assess these lines based on age, condition, and materials to determine option of replacement.”*

The provisions of PW 21032 formulated as a product of the Public Assistance Alternative Procedures Pilot Program for Permanent Work allows for the inclusion of replacement or restoration of any utility to be funded along with scope specifically identified as FEMA-obligated scope. The conceptual scope of work and types of projects outlined as project elements of the proposed use includes underground utility (storm water drainage, water, and sanitary sewer collection). **Funding is available for use on the repair or replacement of underground utility encountered during design assessment or performance of work. Funding such work as a City expense is unnecessary.**

SCOPE ITEM G.

**“INFRASTRUCTURE CONSTRUCTION STANDARDS AND VALUES”**

FEMA notified the City in March 2018, in response to pending and approved amendment request that were submitted to amend scoped projects into PW 21032, of FEMA’s determination the “infrastructure construction standards and values” were omitted in error on the submitted (approved and pending review) plans sets. FEMA returned all amendment requests currently under review for the City to make revisions which capture FEMA’s “infrastructure construction standards and values”. This FEMA directive impacted 14 projects pending FEMA review, and 13 projects FEMA previously approved. The City revised the subject projects in accordance with FEMA guidance received in 2018 and resubmitted for review. Similarly, the City also revised work that was already in construction to comply with FEMA’s recommendations. Further, in 2018 the City drafted and distributed a form letter and checklist to all A/E’s working on road recovery projects requiring certification of compliance with FEMA’s “standards and values”. Correspondence linked to the formulation of the FEMA compliance letter and checklist template indicates that “FEMA reviewed our checklist and confirmed that the checklist complies with their [emphasis] standards.”

There is concern that FEMA has over-reached their authority by making recommendations, perceived by the City as requirements, on the methodology for determining the amount of repair required and how to repair. FEMA used various methodologies to develop the fixed cost estimate but “their standards” were only a tool to resolve the cost estimate of the JIRR agreement and did not carry over as a mandated requirement of the grant. PW 21032 states,

“The number of street blocks or road miles to be restored, and the pavement scope of work methodology (i.e. minor pavement rehabilitation, major pavement rehabilitation, or full roadway reconstruction) will be determined based on the type and extent of other identified roadway repairs, evasive utility repairs, constructability issues, existing site conditions, or adopted pavement management and utility master plans. All work will be performed in accordance with the latest adopted DPW and SWBNO design criteria, protocols, and standards; industry accepted best practices; and/or Applicable codes or ordinances unless superseded by current adopted design criteria and standards pending city council or sewerage & water board approval.”

SCOPE ITEM G.

Recent (January 2019) review comments generated by FEMA indicate that FEMA continues to implement review procedures above and beyond their responsibilities outlined in PW21032. FEMA's review should be limited to environmental and historic preservation oversight as well as compliance with the mandated ADA ramps scope of work transferred with the Arbitration Agreement for CBCA 3344 from PW 20908. PW21032 clearly describes FEMA's responsibilities pertaining to amendment review and approvals of scope.

"The following outlines the process for review and approval of incremental sow amendments: The subgrantee will submit a formal request to GOHSEP/ FEMA for the proposed incremental SOW amendment (amendment). The proposed amendment should include the proposed detailed design, specifications and sow Detailing the location/ neighborhoods and schematics. The submittal should include a detailed narrative description of the proposed work, an estimate of the proposed project costs, and an anticipated start and completion date of the work. The submittal should include a completed special projects checklist (attachment 7). GOHSEP will review the amendment submittal and transmit it to FEMA. FEMA EHP staff will perform a review of each project amendment. FEMA will work with the grantee/subgrantee to address any EHP concerns to ensure compliance. This effort may require modifications to the proposed Project/contract. For compliance with the National Environmental Policy Act (NEPA), FEMA EHP may utilize the JIRR Programmatic Environmental Assessment (PEA), a tiered Environmental Assessment (EA) or a stand-alone NEPA review. FEMA EHP will also conduct a Section 106 review of each amendment in accordance with the Programmatic Agreement among FEMA, the Louisiana State Historic Preservation Officer, GOHSEP, and the Federally recognized tribes with an interest in Louisiana as executed on August 17, 2009 and Amended on July 22, 2011...The Subgrantee will be encouraged to proceed with the legal procurement of the contract proposal upon FEMA EHP clearance."



SCOPE ITEM G.



There is not a requirement in PW21032 for the compliance with FEMA's infrastructure standards and values addressed in the March 30, 2018 letter. There is concern that some of the recommendations described by FEMA in the March 30, 2018 letter are not necessary in all cases and are not the most effective. Additionally, FEMA's excessive review measures related to methodology of repair generates an inefficiency in the approval process and could inhibit progress.

DRAINAGE ASSESSMENT:

PW 21032 Scope includes stormwater drainage assessment over *the CNO DPW minor drainage system*, which *“consists of 7 million linear feet of drainage lines and more than 60,000 inlet structures.”* DPW has the option as part of the JIRR grant to fund minor subsurface drain line assessment. The PW states that, *“additional drainage system lines and structural flushing inspection and analysis services may also be performed as necessary to establish scope of work.”*

Based on the assessment time available, it is unclear when and what drain lines were previously assessed.

The CEA provides clear delineation between what is owned inspected and maintained by CNO and the SWB. The CEA's state that the City owns and maintains the subsurface drainage (pipes below 36" diameter). Yet, it appears that DPW staff are of the opinion or impression that the subsurface drainage is owned by the SWB, and the DPW is only responsible to maintain them. This impression appears to contradict the CEA.

The CEA clearly identifies that the SWB agrees that they will inspect all major drainage, sanitary sewer, minor subsurface drainage (owned by the City) and perform an inspection of the waterlines and provide elevations for the water lines whenever the DPW undertakes a project involving extensive rehabilitation (more than 1/3 of the roadway). The CEA also identifies that the DPW agrees to include all associated FEMA funded water, sewerage, subsurface drainage, and major drainage repairs and replacements. There is concern that SWB will not fulfil inspecting minor subsurface drainage. Based on conversations with various levels of staff, it appears that each agency is relying on the other to inspect minor subsurface drains lines.

SCOPE ITEM G.

RECOMMENDATIONS:

- **Re-examine the “FEMA Compliance Checklist”, for revision to DPW methodology preferences:** The City should revisit the provisions for design requirements identified in the design compliance checklist and information populated to the engineers and determine if the recommendations (developed by FEMA) are necessary and in accordance with preferred methodologies or exceeds CNO typical standards for rehabilitation.
- Leadership and PMs should become more familiar with the provisions of PW21032.
- **Drainage Assessment:** DPW should take the opportunity to assess the utilities while performing the work on upcoming projects. This inspection should take place prior to the completion of design of the work. The DPW should inventory all previous reports relative to planned projects, prioritize the need for assessment, and formulate a plan to assess what wasn't previously assessed. DPW should strongly consider ensuring the complete assessment of ALL drain lines, which can be used to establish a critically needed and useful baseline of drain line condition for a drain line maintenance plan and program.

SCOPE ITEM H.

Evaluate City Standard Operating Procedures for DPW capital projects, and guidance to the AE's.

**HOW THIS TASK WAS COMPLETED:**

The CSRS/H. Davis Cole team assessed the Standard Operating Procedure (SOP) manuals provided by DPW and the PDU and conducted staff interviews with the DPW Director, Project Managers, and PDU staff.

The team also participated in meetings with DPW PMs in reviewing and providing comments and recommendations to the draft Coordination Procedure for the City of New Orleans Department of Public Works and Sewerage and Water Board of New Orleans master document.

FINDINGS:

- 1. No major gaps or issues with Coordination Procedure were observed.**
- DPW is working closely with SWBNO to develop a new Coordination Procedure manual, specific to the JIRR. The Coordination Procedure development team is modifying DPW's SOPs produced in 2012 to focus primarily on the City and SWBNO's newly established procedures for the JIRR. The new Coordination Procedure incorporates a more comprehensive approach outlining the primary scope, tasks, and appropriate protocols and processes.
- 3. Based on discussions with DPW, there is a need to refine and develop more user-friendly SOPs and checklists tailored to the current City and JIRR program criteria, requirements, and processes.** Standardizing regular tasks such as standard construction baseline schedules, closeout/document control checklists, and simplifying the invoicing processes appeared to be the greatest needs.
 - a) Also, creating an internal SOP manual with simplified flowcharts, policies, and checklists and engaging PMs and other JIRR staff when developing or updating these internal SOPs would benefit the program and preserve institutional memory.
- 4. The PDU has multiple and effective internal PDU processes and procedures.** They have developed and are implementing various internal processes and procedures related to tracking coordination correspondence between PDU & DPW and between PDU & FEMA. It appears that PDU staff is effectively monitoring and tracking deliverables to FEMA, track and manage FEMA review timelines, coordinate FEMA review comment, etc.
5. While the PDU has comprehensive processes and understanding of Grant closeout processes, the processes, checklists, and closeout document filing in within DPW can be strengthened with the assistance of PDU Closeout Specialists.

SCOPE ITEM H.

**RECOMMENDATIONS:**

1. The Coordination Procedure SOP is very thorough and all key components of the JIRR are captured. **Simplify the SOP by including key sample documents, checklists, and flowcharts as appendices or attachments.**
2. When implementing any new SOP, **prepare, equip, and support the staff to successfully adopt to the changes.** Receive buy-in from management, team leads, and PMs by educating them along the way, requesting feedback, and providing support after updated SOPs are implemented.
3. With input from JIRR staff, review and, when needed, update SOPs (internal and external) on at least a yearly basis.
4. **Create a simplified internal SOP manual with flowcharts, sample documents, policies, and checklists.**
 - a) **Empower PMs to notify management and create documentation when a standardized process, guidance document, or checklist is required or missing.**
5. **Provide standard guidance, policy, checklist, and/or process/flowchart on the following** (these items were requested specifically by the PM's during the assessment):
 - a) Procedure to notify A/E and contractor for the 1 year warranty inspection
 - b) Standardize the milestone dates to be used in the construction baseline schedule (based on a recent PM meeting, this is currently being addressed)
 - c) Streamline invoice process by requiring A/Es to provide a draft invoice electronically that can be QC'ed by DPW prior to formal submission, thus limiting invoice rejections.
 - d) **Verify and clarify the design review changes process.** PMs believe any change to project units requires submission and EHP review. However, as observed on other programs, after design, all scope within the right-of-way to a depth of 15' is already approved by EHP and does not require further review.
 - e) **Provide simplified and standardized guidance, policy, flowcharts, and/or checklists on "regular, daily tasks." Engage the PMs to identify needs and potential gaps in policy and procedures.**

SCOPE ITEM H.

6. **Strengthen DPW's Grant closeout process by standardizing the Grant closeout checklist and closeout file folders across all JIRR projects.** All project closeout files should be identical. Assign a Closeout Specialist to monitor DPW checklists and closeout files on active projects and notify PM when documentation in the closeout file may be missing.
 - a) **All JIRR staff need to have the mentality that Grant Closeout preparation starts at the beginning of each individual project.**
7. Along with standardizing policies and procedures, **develop clear roles and responsibilities that staff can reference when needed.** Include both roles and responsibilities of individuals and various departments.
8. **Ensure DPW PMs and the respective project A/E's have a clear understanding of the JIRR standards and specifications, including design, contract, plan change, and invoicing requirements.**
 - a) **Convert project design criteria into a checklist** that the PM can reference and update during each design review to verify that all requirements are being met. Have the PM sign, date, and formally file the checklist and use it to update the project schedule and provide copy to the A/E consultant.



SCOPE ITEM I.

Assess construction engineering and inspection (CE&I) quality control processes and procedures for construction management.



HOW THIS TASK WAS COMPLETED:

The team reviewed older DPW Standard Operating Procedures (SOP), current DPW contracts, current specifications, and interviewed City PM staff. The roles and responsibilities for Resident Inspector (RI) and Construction Administrator (CA) positions for the JIRR projects were assessed.

FINDINGS:

- There appears to be no City oversight of RI on the jobsites.
- Many construction quality issues were observed in the field, including grades, cross-sectional thickness of the base course asphalt binder.
- PMs are overwhelmed with design reviews, so they are not making sufficient site visits at construction projects.
- RIs are not reporting deficiencies as needed to ensure corrective actions are taken and enforced.

RECOMMENDATIONS:

Suggested responsibilities for the RI and CA staff are below:

RESIDENT INSPECTOR (RI):

Pre-Construction:

- Attend pre-construction meeting.

During Construction:

- Be on the project site when construction work is being performed.
- Directly observe critical construction tasks.
- Photograph and/or document work progress.
- Review the contractors red-line drawings on a bi-weekly basis.
- Attend all progress meetings.
- Verify proper materials are used and all scope is completed in accordance with the plans and specifications agreed to in the contract for each project.
- Notify the Contractor, Construction Administrator (CA) and the Director of any deficiencies or non-compliance with the project plans and specifications.

SCOPE ITEM I.



- Ensure construction activities do not adversely affect utilities, adjacent areas and/or property, etc.
- Verify the contractor is following the approved Storm Water Pollution Prevention Plan (SWPPP).
- Verify the contractor is following the approved Traffic Control Plan (TCP) and site safety procedures.
- Monitor the Contractor's schedule for timely execution of the approved scope and perform any required interviews and/or after-action reports with the Contractor.
- Document and notify the CA of any problems that may impact project's cost or construction timeline.
- Prepare and maintain all construction field records normally maintained by DPW, Weather & Working day Report, Project Diary/ Daily Log, Schedule of Work Items, etc.
- Document all paid items of work and quantities completed.
- Document and notify the CA of any unforeseen conditions encountered during construction.
- Coordinate with and monitor work performed by material testing agency, utilities, and other on-site visitors as required.
- Prepare memorandums or documentation required for field changes.
- Prepare incident reports.
- Assist the city with complaints, related to construction activities.
- Assist the city with claims and disputes arising from construction.

Substantial Completion / Close Out:

- Attend preliminary and final substantial completion inspection with DPW, SWB, and the contractor.

CONSTRUCTION ADMINISTRATOR (CA):**Pre-Construction:**

- Submit Resident Inspectors (RI) resume to DPW for review and approval, if the RI is employed by or contracted by the Construction Administrator's firm.
- Schedule Resident Inspection (RI) services, if the RI is employed by or contracted by the Construction Administrator's firm.
- Conduct pre-construction meeting, prepare/distribute meeting agenda and meeting minutes.

SCOPE ITEM I.

- Obtain and document pre-construction video, if required.
- Review and approve the contractors Storm Water Pollution Prevention Plan (SWPPP) a minimum of 10 working days prior to beginning construction. Construction shall not begin until the SWPPP is approved.
- Verify that the contractor has obtained all permits, an approved traffic control plan and approved construction sequence and schedule. Construction shall not begin until all approvals have been verified.
- Review and track material submittals, approve, or take other appropriate action, for shop drawings and samples which the contractor is required to submit (as warranted).
- Evaluate and determine acceptability of substitute or “or-equal” materials and equipment proposed by the contractor.

During Construction:

- Recommend, to the Director, work be rejected while in progress if not in accordance with contract documents and threatens integrity of the design concept.
- Review and track contractor Requests for Information (RFIs) and respond as necessary.
- Assist with technical issues arising during construction.
- Issue necessary interpretations and clarifications of the contract documents as appropriate (field orders).
- Assist the city with complaints, regarding construction activities.
- Assist the city with claims and disputes arising from construction
- Perform occasional site visits at intervals appropriate to various stages of construction
- Conduct progress meetings (bi-weekly), prepare agendas and meeting minutes.
- Monitor and track construction sequencing, scheduling and progress.
- Notify DPW of any problems that may impact the project’s cost or construction time.
- Review Resident Inspectors daily reports.
- Coordinate with the Resident Inspector for estimated pay item quantities for contractor invoicing
- Review quantities and pay applications for contractor and recommend payment



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- Review contractor proposed change orders and verify cost reasonableness, and prepare contract change orders
- Review contractor request for added days, and special work requests (i.e. working hours outside hours allowed by specifications, roadway closures, etc.)
- Review all testing reports as submitted by the testing laboratory and report to the Department if any of the work or material is not in conformance with the project's Construction Documents based upon test results
- Review and make recommendation for approval of pay request for the testing laboratory for consistency with the testing performed.

Substantial Completion / Close Out:

- Conduct preliminary and final substantial completion inspection with DPW, S&WB and the contractor, and prepare punch list(s).
- Recommend substantial completion, and prepare substantial completion documentation
- Verify that a clear lien certificate has been issued to the contractor.
- Prepare and submit a statement of final cost underruns/overruns
- Prepare and submit all construction related documentation and "As-Built" drawings
- Once construction activities ramp up, the City should increase the number of CA's who are capable and familiar with construction practices, can monitor critical path schedules, and report deficiencies to the PM and Program Administrator.
- Conduct one-year warranty inspection with the contractor and provide the Director a detailed report with photographs depicting all deficiencies and listing corrective actions for which the Construction Contractor is responsible.
- Enforce on-time reporting and information sharing with the Projects Control group.
- Enforce on-time reporting and information sharing with the Financial & Grants Management Control group.
- Integrate all identified tasks with a document retention plan, where appropriate.
- Consider adding DPW's current standard form numbers for continuity.

SCOPE ITEM J.

Evaluate how consistently design standards are being used and how to better operationalize these standards.

**HOW THIS TASK WAS COMPLETED:**

This task was completed using collaborative reviews & discussion of current procedures & processes with City personnel and further informed by the reviewer's prior experience under a previous Program Management contract, which involved significant time embedded in DPW and working concurrently with City personnel on these types of tasks.

FINDINGS:

City DPW historically under the FEMA program has attempted to standardize procedure, processes, standards and methodology for the performance of specific tasks/duties by City personnel & consultants with overall positive results. However, as with any fluid program with other stakeholders & funding agencies changes are inevitable and the documents should be periodically reviewed and updated in accordance with the latest requirements & directions.

RECOMMENDATIONS:

- Review and modify the current project and design standards, procures, and processes in accordance with the latests City and SWBNO codes and standards annually. This includes the incorporation of resiliency design standards as desired. This also includes the re-evaluation of FEMA-stated "standards" that may not be applicable to the flexibilities within the JIRR.
- Facilitate a training for all PMs on the design standards, including annual refresher trainings.
- Since there is only one design manager, add more design review capacity.
- When FEMA makes stated new requirements, the City PMs should be knowledgeable enough of the City's own requirements to feel comfortable in pushing back on unnecessary new stated requirements when appropriate.

SCOPE ITEM K. *Assess reporting capabilities.*



HOW THIS TASK WAS COMPLETED:

This task was completed by conducting staff interviews with the DPW Project Controls department and DPW Project Managers and reviewing various reporting tools including the DPW Dashboard, the interactive catch basin cleaning tracking tool, GIS mapping capabilities, and P-6 scheduling tool and reporting abilities.

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FINDINGS:

- The DPW Project Controls team is very strong and possesses the skills and understanding to extrapolate data from various resources and present results that are meaningful and useful. The entire team is very knowledgeable and innovative.
- The DPW Dashboard, updated weekly, is very comprehensive, user friendly, and has a very positive impact for managing individual projects and tracking the success of the overall JIRR program.
- DPW's GIS capabilities are robust and the maps produced are very useful and user friendly.
- The information managed in P-6 is extremely detailed and very organized.

RECOMMENDATIONS:

- Explore incorporating PDU metrics and needs into DPW's reporting capabilities, making one, cohesive JIRR program reporting tool.
- Continue to build on current platform and incorporate additional standardized reports onto an online portal that can be utilized by the entire JIRR program and upper management.
- Utilizing Time Clock Plus, and eventually ERP or ADP, incorporate a monthly report for upper management that calculates how much PM and COI/DAC has been spent to date, what's been submitted for reimbursement, and what's been reimbursed. Include projections and burn rates that managers can use to make necessary staffing adjustments as needed.

SCOPE ITEM L.

Assess the NOLA construction market and vendor capacity.



HOW THIS TASK WAS COMPLETED:

To gauge construction industry’s capacity for the voluminous amount of work to be generated by the JIRR program, we engaged in a dialogue with the various professional industry associations within the greater New Orleans area, including:

- Heavy Civil Construction
- Highway, Street, & Bridge Construction
- Heavy Construction
- Municipal & Public Works Construction

Additionally, we sent a survey to each of the industry groups, associations, and outreach agents in the City with large member bases that could likely compete in this space. We also engaged in conversations with known contractors even beyond those that are members of any of the associations below:

- | | | |
|---|--|---|
| <ul style="list-style-type: none"> • Louisiana Association of General Contractors (LAGC) • New Orleans Regional Black Chamber of Commerce (NORBCC) • New Orleans Chamber of Commerce • New Orleans Business Alliance (NOBA) • Louisiana Chapter of National Association of Women in Construction | <ul style="list-style-type: none"> • The Collaborative (NAWIC) • Small Business Association (SBA) • Justice & Beyond • The Good Work Network • Urban League’s Women’s Business Resource Center (WBRC) • Minority Business Consultant at LA – DOTD (SJB group – Kenyatta Sparks) • Supplier Diversity Office for New Orleans Airport | <ul style="list-style-type: none"> • Supplier Diversity Office for Sewerage & Water Board of New Orleans • Supplier Diversity Office for Port of New Orleans & Public Belt Railroad • South Louisiana Procurement Technical Assistance Center • Supplier Diversity Office for HGBM-JV (Airport new terminal construction management Team) |
|---|--|---|

SCOPE ITEM L.



The survey sent to these entities focused on gaining a greater understanding of the following criteria (see attached survey):

- Whether or not the company is licensed.
- What type of certification(s) the company holds with the Louisiana State Licensing Board (Heavy Civil Construction, Highway, Street, & Bridge Construction, Heavy Civil Construction, or Municipal & Public Works Construction).
- The range of Bonding Capacity the firm holds.
- How many years the company has been in business.
- Whether or not the firm is a Certified Disadvantaged Business Enterprise (DBE).
- Whether or not the firm holds any current Mentor-Protégé relationships.

**We sought information from the Small Business administration to help identify more companies in these sectors in the Greater New Orleans Area but were unable to receive information due to the government shutdown, which commenced just as this effort was undertaken.*

We were able to obtain member lists in the subject industries from a few of the various agencies. We also attempted to identify suppliers in this space as well. In order to meet their goals, prime contractors should seek not only DBE construction companies, but certified DBE materials suppliers as well. Suppliers are counted in the viable numbers of DBE's in the information contained herein and in available attachments.

We also used the United States Census Bureau's business look up tool to identify how many businesses are registered within this space in the New Orleans area as a tool of comparison to the other lists of companies we have obtained by community partners and agencies, and the self-reporting by way of the survey.

SCOPE ITEM L.

FINDINGS:

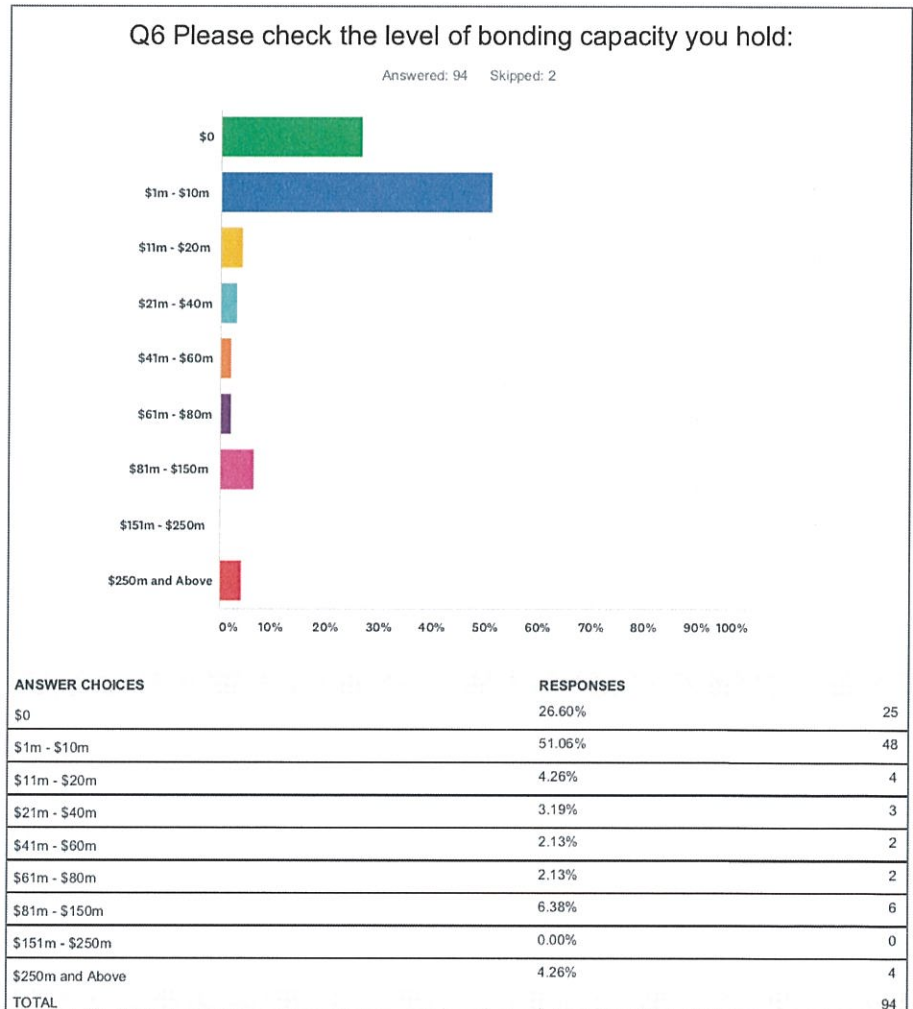
The Census data identified approximately 24 Firms in the greater New Orleans area that are in the Heavy Construction sector as of 2016. The Louisiana Association of General Contractors (AGC), lists a roster of approximately 31 member firms who operate as Heavy Civil Contractors. There were approximately 88 certified Disadvantaged Business Enterprises in the identified markets relative to this work on the State & Local DBE lists used by SWB, City of New Orleans Aviation Board, and The Harrah's Casino.

SURVEY RESPONSES

The survey referenced above received 95 total respondents from the Contracting community. Here are the results from the survey (actual responses available as an attachment):

- 95 Total responses received
- 87.37% or 83 respondents affirmed that they are licensed through the Louisiana State Licensing Board for Contractors.
- 44 respondents affirmed that they are licensed in Highway, Street, & Bridge Construction.
- 56 respondents affirmed that they are licensed in Heavy Construction.
- 51 respondents affirmed that they are licensed Municipal & Public Works Construction.
- 76 of 94 respondents affirmed that they are Certified Disadvantaged Business Enterprises in the City of New Orleans.
- The levels of bonding capacity of 94 responses are shown in the table to the right:

We surveyed approximately 94 companies that are able to compete for this type of work, with bonding levels from \$0 dollars up to \$250m and above (details charted above). Of these numbers, we were only able to find approximately 7 firms that have participated in some type of Mentor-Protégé relationships as either a mentor or a protégé.



SCOPE ITEM L.

CONSTRUCTION INDUSTRY CONCERNS

We found that the construction community as a whole, as well as many engineering firms are skeptical that the City has the capacity to undergo a program of this magnitude and scale with the current workforce there is inside of DPW. **Some contractors have communicated via the AGC that they did not even want to respond to the survey “without any commitment [explanation] from the City in upholding their end [of the JIRR program] efficiently.”**

It is important to note that there are many other companies doing business within the subject industries who declined to take the survey. There are more companies likely to compete in the work than responses to the survey.

Simply put, the construction & engineering (AGC, ACEC, NORBCC and other community stakeholder organizations) community alike, have expressed a lack of faith that the project managers at DPW and SWB will be able to keep up with the work. They expressed concern that the City and SWBNO will be unable to respond in the efficient and timely manner required in the course of a job. They also voiced major concerns about timely payment processing.

Community advocate groups for DBE's, and the DBE companies themselves also voiced the same concern over timely processing and payment of invoices by the City. They are concerned that if the City has trouble processing payments with their current workload, a higher volume of work may drag the payment cycle out even longer and severely cripple a business' ability to operate due to extreme constraints on cash flow. Some survey respondents even sent messages stating that due to these various issues, they may bid the job higher to cover the costs of the administrative burden involved in contracting with the City.

Regarding current invoices and payments, there is a difference in understanding between the City and current contractors. In the City's understanding the only reason for a delay in payments is due to contractors and consultants submitting incorrect invoices and taking an extended period of time to submit revised invoices with the with correct information. The City has held clinics to explain to vendors what details a proper invoice must include and has created a presentation and template to help guide contractors on these processes.

The disconnect on this issue between the City and some of its vendors seems to have caused a great deal of anxiety on both sides. More clinics of this magnitude will surely need to be held ahead of the large volume of work, to help ease the frustrations of the city and its vendors, facilitate greater understanding on proper invoicing and reducing the lag time on processing of payments.

PROGRAM ACCESSIBILITY FOR SMALL BUSINESSES AND DBEs

Prime contractors of any size or magnitude cannot and will not float payments to subcontractors while awaiting payment of invoices from the City. This is not the responsibility of the prime, nor is it a viable business practice. Contracts with the City most usually state that the prime will, “pay when paid” and in a timely fashion to any of its subcontractors. Timely payments from the City to the prime contractors are the best way to ensure that all businesses can function properly and prudently in order to secure business continuity and growth.

Breaking packages down into \$1m to \$5m dollar packaging would likely make it more viable for DBE's and small businesses to compete as primes, though this must also be balanced to ensure the projects see the benefits of economies of scale. Allowing these DBE's to prime some of these opportunities will increase their recent

SCOPE ITEM L.

past performance repertoire and help them to grow. With consistency of opportunity in the market, they will be able to keep personnel on board and continue to improve their processes and methods while growing as a firm. There are many DBE firms that will be seeking to retain the personnel they have added while completing their work on the airport project, which will be ending soon. The timing of the increased rate of work opportunities generated by the JIRR Program is important. The possibility of being able to meet DBE goals will need to be balanced with the amount of certified DBE's there are in order to complete the work. While the goals for DBE percentages should remain aggressive, there should be ongoing outreach and market research while the program is in progress to keep ahead of future opportunity to be let.

MARKET FACTORS TO CONSIDER

Currently, there are relatively fewer federal funds flowing to Louisiana DOTD, making this a good time for the City to start engaging the construction market. Contractors are concerned that there is currently not much opportunity for new work and it is hard to retain personnel as a result. They are afraid that the labor pool will start to seek work outside of the region.

The City of Baton Rouge will be initiating a widespread road improvement program very shortly that is estimated to be about an \$872 million-dollar effort. The tax passed the council and ballot in December of 2018, and the City will be starting the program after it selects a program manager, which is scheduled to take place in the first quarter of 2019.

If the City of Baton Rouge, and/or Louisiana DOTD start any type of large-scale efforts prior to the City of New Orleans getting started on its program, the City will likely pay a premium on construction costs and will see the market start to saturate very quickly.

The State of Mississippi is also just getting started on a federally funded Five Year Statewide Transportation improvement program. This program is starting this year and will go till at least year 2021. This endeavor will be covering the urbanized areas of the state starting in Jackson, then on to the Gulf Coast, Hattiesburg, and then further north into the state. There are many large construction primes in the area who also compete for work along that I-55 and I-49 corridor. This is another factor to be aware of as the years of the program go on.

SCOPE ITEM L.

RECOMMENDATIONS:**1. INCREASE ACCESS TO OPPORTUNITY FOR SMALL BUSINESSES AND DBE's:****a. Develop a robust construction industry engagement program**

Partner with trade organizations to hold Road Construction Industry days modeled after the Recovery School District / Orleans Parish School Board School Construction Industry days which encourage introductions between small businesses, DBE's and primes that can lead to partnerships by supporting relationship building. These industry days can also serve as information sessions to help the industry, as a whole, better understand the work opportunities and explain expectations on bidding the work, completion of the work, and what constitutes meaningful efforts on the addition of DBE's to the team. Helping the workforce to prepare for what is ahead and sticking to the information given readies everyone for success.

b. Engage DBEs directly

The City can ask DBE companies for their input on what would make them able to compete for infrastructure work successfully and consider this information when creating bid opportunities and good faith efforts.

c. Develop a Mentor – Protégé Program

Again following the RSB / OPSB model, the City could pursue success by supporting seasoned prime contractors and small businesses or DBEs that are at a growth stage through facilitating mentor-protégé relationships. The prime contractor who agrees to mentor the DBE protégé subcontractor, should have a set of goals which both companies agree to achieve. The businesses that agree to take on a protégé are not only helping the protégé, but they have now found a trustworthy subcontractor and teammate and have helped to build up another business who should then foster the same 'reach back' into the community. This 'pay it forward' type of business technical assistance could help to grow the number of small business and DBE primes in our area.

d. Increase access through smaller bid sizes

City could make a concerted effort to break bid packages into smaller sizes when feasible to give small and disadvantaged businesses a better opportunity to compete as prime contractors. The research contained in the survey and during potential outreach sessions can help the city to understand the best way to build such opportunity.

maybe
wave 3/4

SCOPE ITEM L.

2. INCREASE TRANSPARENCY AND ACCOUNTABILITY

a. Clarify level of effort required

City could estimate the average manpower needed on a construction job of a certain value, for a certain number of blocks or corners, and make available to bidders that total number. It may be easier to ascertain what success looks like in the DBE effort if this can be sorted out ahead of time.

b. Limit and minimize change orders wherever feasible

Construction companies should be held to their bid prices which they submitted to win the job. Change orders will occur from time to time due to the nature of the work in the field, but multiple and substantial change orders cost the City money and threaten project budgets set on the cost of construction that was estimated for a job. Historically, the parameters of public bid law cause contractors to bid their jobs severely low, at costs they know are less than the actual costs of completing the work. This causes Primes to therefore lower their subcontract pricing, which can make it unprofitable for those subcontractors to complete the work. This is another way in which primes have marked DBE's "unresponsive" when forming teams, and then report that they were unable to find viable subs.

c. Create a payment timetable for projects

The City could consider developing with contractors a time table on payment so that contractors' expectations are regarding "pay when paid" don't cause issues for DBE contractors. Not paying contractors on time stifles the ability for the DBE to compete viably and jeopardizes the ability of the Prime and subs to be successful.

d. Clarify Expectations

City should show, explain, and give examples of what success 'looks like' for firms that have completed jobs successfully and met or exceeded their goals. The City has often stated firmly in the beginning of projects what is expected but could also increase understanding through case studies. The City should consider provided more in-depth guidelines on what does and does not constitute a good faith effort.

e. Capacity building

The City should consider partnering with industry experts to provide training small business and DBE on their rights under the law as subcontractors.

f. Publish payment information

The City could consider publishing through its open data portal all payments made with amount, vendor, and date so that the industry as a whole and individual vendors can track payment history.

*Privacy Issue?
Legal?*

SCOPE ITEM M.

Evaluate resilient design options, and funding source requirements and make recommendations as to how to incorporate them with the JIRR projects.



As a global leader in resilience thinking and action, the City of New Orleans seeks to evaluate its design standards and procedures to ensure that disaster recovery funds are used not just put repair what was damaged, but to build future resilience as well. The JIRR Program is an opportunity to integrate the extensive amount of resilience planning the City has conducted and apply the practices City-wide.

HOW THIS TASK WAS COMPLETED:

A series of interviews were conducted with specific individuals who are integral to the inclusion of resilience in the program. CSRS interviewed the City of New Orleans officials listed below, which guided the following findings and recommendations:

- Keith LaGrange, Director of Department of Public Works
- Mary Kincaid, Department of Public Works
- Jennifer Ruley, Senior Manager and Special Projects Team
- Laura Bryant, Mayor's Office of Transportation
- Tyler Antrup, Urban Water Program Manager *who?*

FINDINGS:**Resilient design features can be integrated into the design process right away.**

Since the scope of work for Project Worksheet 21032 is flexible, the City can require design consultants to incorporate design elements for green infrastructure and complete streets during the design process.

The City will likely wish to adopt official policies and procedures to formalize and institutionalize the inclusion of resilience design standards.

The City already has many tools such as the Green Infrastructure Toolkit and the Complete Streets Program Management Plan that can be updated, adopted, and deployed to guide how stormwater management and bicycle infrastructure and other resilience design features are incorporated into the JIRR program. This would allow the scope of future projects to meet the City's highest priorities and greatest needs and to be aligned with the City-wide stormwater model, any new complete streets and green infrastructure design requirements, and the bicycle Master Plan that is still in development.

SCOPE ITEM M.

RECOMMENDATIONS:

Overall recommendation: Continue projects currently in design (Waves 1 and 2), but revisit and reformulate the scope of future projects, wherever feasible, to incorporate stormwater design features, bicycle infrastructure, and other complete streets elements while concurrently developing and adopting official policies and procedures to formalize and institutionalize these practices.

To formalize and institutionalize the policies and procedures guiding how green infrastructure and complete streets elements are incorporated into the JIRR and other DPW streets, pursue the following policy action items:

UPDATE THE CAO COMPLETE STREET POLICY:

The 2016 CAO's Complete Streets Policy was created to ensure a more comprehensive and integrated transportation network that balances the needs of all of its users in order to promote economic development, improve public safety, foster more livable communities, encourage healthier lifestyles, promote geographic and socio-economic equity, and develop a balanced street ecology for sustainability and resilience.

All City departments in the planning, design, construction, operation and maintenance of all capital improvement projects adjacent to or within the public right of way, shall take a comprehensive and integrated approach within the context of the City's Complete Streets Program. Includes but not limited to: motor vehicle operators, public transportation services, bicyclists, pedestrians, users with disabilities, and including water distribution, sewerage collection, stormwater management facilities and other utilities to achieve the overall purpose of each project in support of the City's Master Plan and meet the goals of the Complete Streets Program.

REFERENCES: *Number 134 CAO Policy*
City of Portland Green Streets Policy

UPDATE THE COMPLETE STREETS PROGRAM MANAGEMENT PLAN:

Per the CAO's Policy, the Director of the Department of Public Works, in consultation with the Executive Director of the City Planning Commission, shall update the 2012 Complete Streets Program Management Plan. This 2012 Program Management Plan shall establish program objectives and metrics and serve as a working, living guide for program execution.

The green infrastructure checklist currently lives as a separate document and supports the 7 goals outlined within the CAO's Complete Street Policy. It is our recommendation to include the green infrastructure checklist as a supporting document to the updated Program Management Plan.

REFERENCES: *2012 Complete Streets Program Management Plan*
City of New Orleans Green Infrastructure Checklist
Seattle Green Infrastructure Checklist
Sewerage and Water Board of New Orleans – Green Infrastructure

SCOPE ITEM M.

UPDATE AND ADOPT THE STREET DESIGN STANDARD:

The Department of Public Works is currently working under a June 2012 Design Data Manual. The Manual is used to guide the City’s road program for Bond, Capital & FEMA-Funded Infrastructure projects. In every interview, the need for a new street design standard was a priority. Therefore, the 2012 Design Manual should be revised to include today’s best practices and incorporate a new street standard within as many JIRR projects as possible. Baronne Street between MLK and Phillip’s is currently under design with progressive design considerations. A JIRR Team should review the plans, conduct a site visit and evaluate how to integrate selected elements into the JIRR Program.

The standard should define street types, consider complete street elements, green infrastructure measures and new specifications to ensure a more resilient project is implemented. Below is a flow chart outlining the next steps of this task:



As mentioned in a Flood Reduction White Paper, prepared by Mary Kincaid and Stantec, the City recognizes the need for improvements over the standard street design, and requires that all new street construction treat the first 1.25” of stormwater flow. By taking advantage of the opportunity presented by the recovery road projects, green infrastructure can be implemented alongside the traditional road repair projects and exceed current street requirements.

In addition, the Sewerage and Water Board of New Orleans has committed \$500,000 a year for green infrastructure pilot projects which include demonstration, education and outreach projects. The updated street design standard should be presented to the board and annual goals should be adopted to achieve a minimum of three year transparent implementation plan.

- REFERENCES:**
- 2012 Complete Street Design Standard*
 - City of New Orleans Green Infrastructure Toolkit*
 - City of Seattle Department of Planning & Development and Public Utilities Standard*
 - Flood Reduction White Paper*

SCOPE ITEM M.

**UPDATE A STREET MAINTENANCE COST CALCULATOR:**

Understanding long-term maintenance cost will be a transparent process in the future. The City of New Orleans is all too familiar with dealing with the burden of road maintenance. Therefore, a maintenance cost calculator is recommended to be created and used by each design firm working on the JIRR Program. The calculator should produce a one-page summary of expected cost for City officials to review and approve. The cost will include green infrastructure items and will be a 20-year projection.

In 2004 the City's Planning Commission developed an exercise to project future operation and maintenance cost for traditional road projects. The document should be updated and complete with typical repair methods, maintenance strategies and proactive cost. Once updated, apply the calculator to the JIRR program under the supervision of the Department of Public Works.

Recently, HR&A Advisors created a green infrastructure calculator for the Gentilly Resilience District. The planning commission operation and maintenance projections should include the green infrastructure calculator to create a comprehensive Department of Public Works calculator.

REFERENCES: *2004 Planning Commission Street Operation and Maintenance Projections*
HR&A Green Infrastructure Calculator

COORDINATE WAVE 3, 4 AND 5 JIRR PROJECTS WITH BIKE MASTER PLAN:

The JIRR program's goal should be to design and manage the transportation network to expand travel opportunities for bicyclists by minimizing potential travel disruptions and maximizing safety. Bicycle accommodations include semi exclusive use of bicycles, such as bicycle lanes, bicycle paths, shared use paths, marked shared lanes (sharrows); as well as other interventions to make a transportation network or facility safer or friendlier for bicycle users.

The City of New Orleans recently completed a City-wide analysis for the Bike Path Master Plan. At this time the fully funded bike path master planning efforts are shifting to the sub-area analysis phase. The bike path master plan is anticipated to be complete in 2 calendar years. Wave 3, 4 and 5 JIRR project locations should be identified as soon as possible and shared with the bike path master planning team for coordination opportunities.

REFERENCES: *Bike Path Master Plan City-Wide Analysis*
City of New Orleans Bike Path Overview

SCOPE ITEM M.

COMPLETE STREETS & GREEN INFRASTRUCTURE JIRR TRAINING:

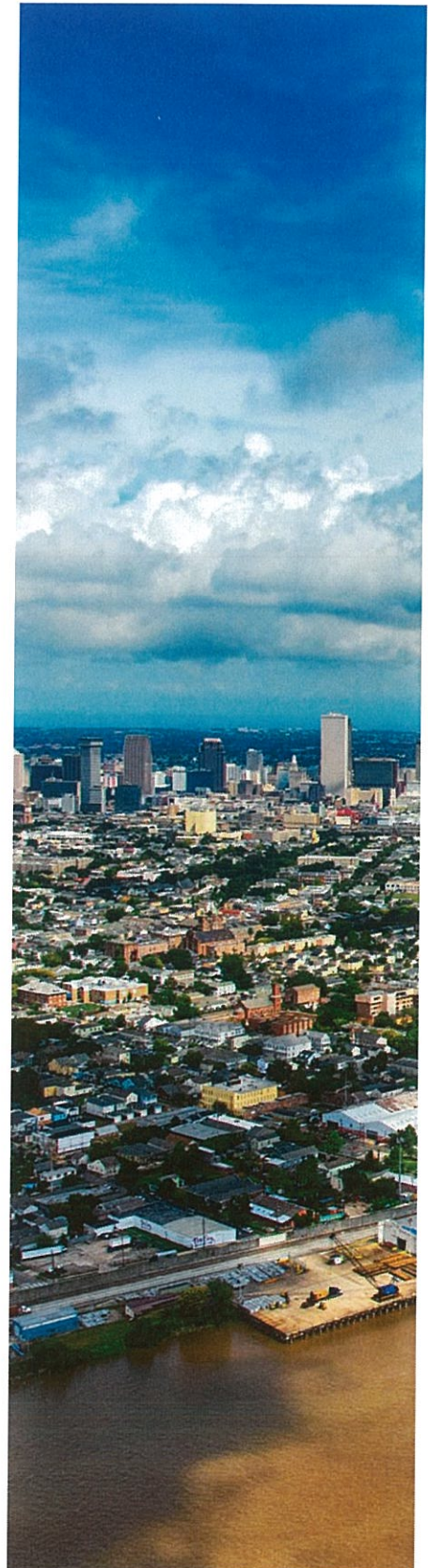
Training presents a prime opportunity to expand complete street knowledge with professionals who contribute to the JIRR Program. Training will provide a greater understanding of positive impacts the program has on the City and how each person's role and responsibility benefit the program. This level of engagement will build confidence and spark creativity to ensure great results. Lastly, training will increase internal resources across all departments, establish a mentor base and position New Orleans for success.

The following topics should be a focus for internal training sessions:

- How to scope a project?
- How to communicate with designers?
- How to conduct a successful site visit?
- How to communicate with contractors?
- Reviewing construction drawings 101
- What does QA/QC mean?
- The importance of processing an invoice
- Project delivery, execution and close-out
- Mentorship Programs

yes!!

REFERENCES: *Sewerage and Water Board Green Infrastructure website*
Sewerage and Water Board GIS of Green Infrastructure Projects



SCOPE ITEM N.*Assist DPW with monthly and quarterly reporting.***HOW THIS TASK WAS COMPLETED:**

This task was completed by conducting staff interviews with the DPW Project Controls department, meeting with the DPW and SWBNO metrics group during the monthly, joint JIRR meeting and attending the Quarterly Report finalization meeting with DPW Project Controls and PDU management. The reports discussed were the Quarterly and Monthly reports.

FINDINGS:

- The source of information for both reports is P-6 with budget and expenditure information coming from Quickbase.
- SWBNO provides the DPW Scheduler with their P-6 reports and construction budget information which is manually input into P-6 to avoid overriding any DPW information.
 - The only cost information being reported for SWBNO is the construction budget and the actual construction costs/expenditures as those costs are intertwined with the City's invoices.
- The raw information is extracted from P-6 and provided to a report developer to manually manipulate into tables and graphs to be used in final report.
- The Baseline for both reports is May 2018, which is when the new Administrations took office.

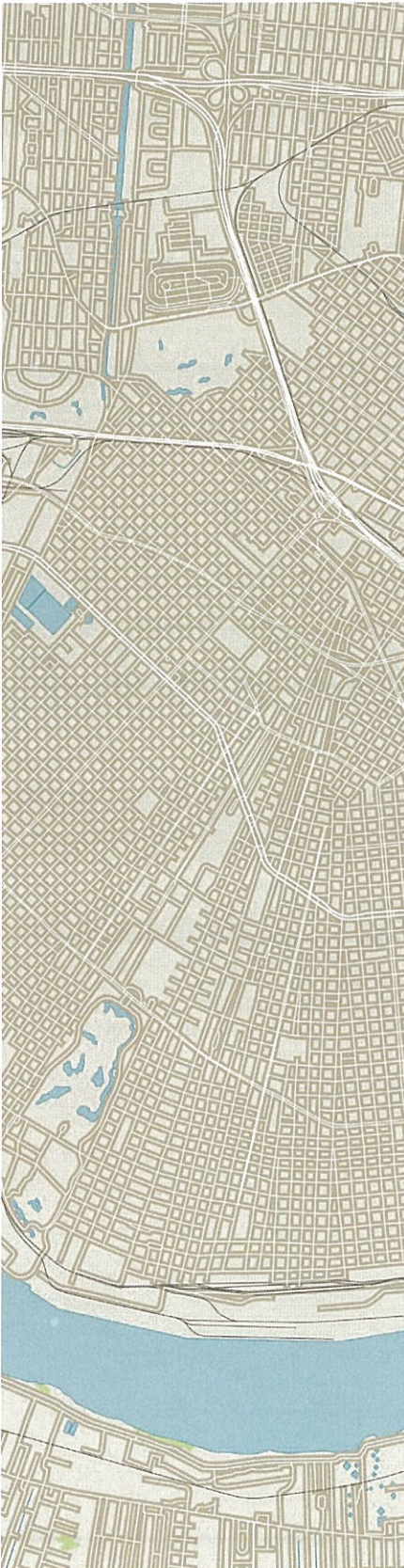
QUARTERLY REPORT

- **Audience:** FEMA
- **Purpose:** To show FEMA the progress of the JIRR program
- **Current version:** On second iteration of report

MONTHLY REPORT

- **Audience:** Council Members
- **Purpose:** To show Council Members progress of the JIRR program and how much construction dollars are being expended in each district
- Report has not been made public

SCOPE ITEM N.

**RECOMMENDATIONS:**

- With the new DPW Director in place, consider resetting the Baseline:
 - Either reset the Baseline for all waves to January 2019 to reflect new management or
 - Leave Baseline for waves 1 & 2 but reset Baseline for waves 3 & 4
- Add a note to both reports clarifying that SWBNO's construction budget and actual construction costs are included in the report. Their planning and design fees are not.

QUARTERLY REPORT

- Automate report and assign staff to review the numbers before submitting to FEMA. Eliminate the manual processes to produce this report wherever possible. This is a current goal that the City is working towards.
- While this report shows the City's progress, also include a slide (or slides) showing FEMA and GOHSEP progress and potential bottlenecks. Consider an aging report and highlight projects or issues that require FEMA or GOHSEP resolution.
 - **FEMA Section**
 - Count of projects in FEMA review, broken down by days in queue (less than a week, one week to one month, one month to three months, etc)
 - Provide estimate on number of projects the City plans to submit to FEMA over a period of time (monthly or quarterly)
 - **GOHSEP Section**
 - Total dollar amount submitted to FEMA for reimbursement, total reimbursed, total pending approval, total approved, total deemed ineligible.

MONTHLY REPORT

- The report is lengthy and should be simplified where possible. Recommend re-organizing the report to focus on tables and graphs and move all other information to the back of the report as an appendix.
 - Slide 1 – Move to appendix.
 - Slide 2 – Change list to a table (match with the quarterly report).
 - Slide 3 – Move to appendix.

SCOPE ITEM N.

- Slide 4 – Delete. Besides showing the Baseline, this is a repeat of slide 2
- Slide 5 – Delete. Besides showing the Baseline, this is a repeat of slide 2
- Slide 6 – Table is too small and difficult to read. Consider adjusting the starting date to 2017 and adjust the Y axis for a better fit.
- Slide 7 – Table is difficult to read. Consider eliminating the bar chart and only show the project name, start date, projected finish date, and % complete. If leaving the bar chart, change the colors of the bars to not match the previous charts. Blue should always mean Baseline and orange should always mean current throughout the report.
- Slide 8 – 11 – Move to appendix.
- Slide 12 – 15 – Create a summary table (possibly by council district) and move the details to the appendix.
- Slide 16 – 20 – Leave, but add a note stating that if projects cross council districts they are counted in both districts.
- Slide 21 – 31 – move to appendix
- Consider adding a slide to the beginning of the report to highlight big wins or takeaways from this month's report. For example:

This Month:

- 1 Project in Council District D was advertised for Bid
- 2 Projects are in Substantial Completion (1 in District A, 1 in District B)
- 5 Projects were submitted to FEMA for review
- Held a public meeting for Project X in District D
- Scheduled public meeting for Project Y in District A on February 20th, 2019

Talk to
Wate and
Keith on this

