

Developing Capital Stacks to Develop Your Community

Michael Washburn, PE and Jeff Hanson | Iowa League of Cities Annual Conference | 2024



Introductions







Michael Washburn, PE Team Leader, Water Jeff Hanson Business Development Lead, Transportation

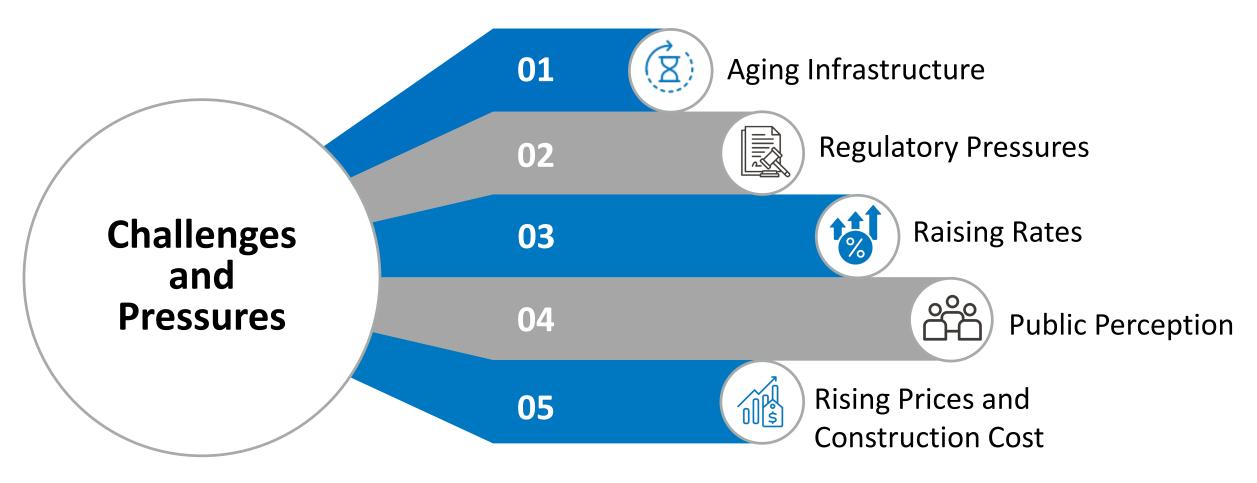
Cities Need Capital

- ✓ Essential services require facilities
 - (Police, Fire, Public Works, etc.)
- ✓ Infrastructure to maintain service
- ✓ Infrastructure to grow
- ✓ Amenities to attract
- ✓ Where and how can you get this capital?



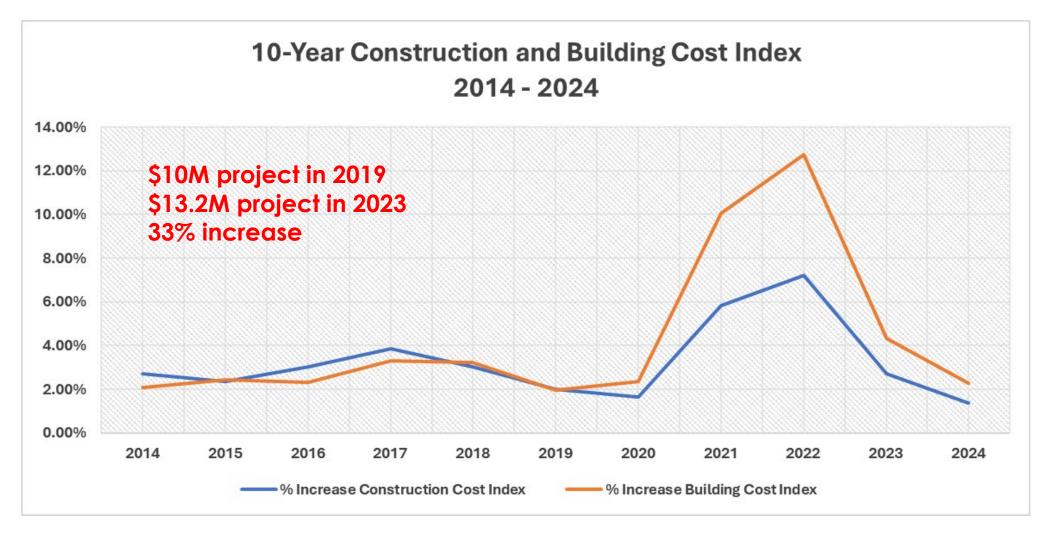
Challenges and Pressures Faced When Developing Capital Projects





Inflation in Construction





Cost Escalation – How to Factor In

- \checkmark Select an inflation factor
- ✓ Estimate costs in today's dollars, using most recent similar projects
- ✓ Then escalate to the mid-point year of construction
 - 1 year of planning
 - 1.5 year of design
 - 2-3 years of construction



Contingency – How to Factor In

Cost Estimate Classification Matrix for Process Industries

	Primary Characteristic		Secondary Character	istic
Estimate Class	Maturity Level of Project Definition Deliverables Expressed as % complete definition	End Usage Typical purpose of estimate	Methodology Typical estimating method	Expected Accuracy Range Typical variation in low and high ranges at an 80% confidence interval
Class 5	0% to 2%	Concept Screening	Capacity factored, parametric models, judgment, or analogy	L: -20% to -50% H: +30% to +100%
Class 4	1% to 15%	Study or Feasibility	Equipment factored or parametric models	L: -15% to -30% H: +20% to +50%
Class 3	10% to 40%	Budget Authorization or Control	Semi-detailed unit costs with with assembly level line items	L: -10% to -20% H: +10% to +30%
Class 2	Class 2 30% to 75%		Detailed unit cost with forced etailed take-off	
Class 1 65% to 100%		Check Estimate or Bid/Tender	Detailed unit cost with detailed take-off	L: -3% to -10% H: +3% to +15%



- ✓ AACE International Recommended Practice No. 18R-97
- ✓ Cost Estimate Classification System

Recommended Contingency

Class	State of Project	Recommended Contingency Range	Target Contingency	
Class 5	Plan of Action	25-35%	30%	
Class 4	Facility Plan/PER	15-25%	20%	
Class 3	30% Basis of Design	10-20%	15%	
Class 2	60% Design	5-15%	10%	
Class 1	90% Design	3-6%	5%	
01855 1	100% Design	2-4%	3%	

History of Water/Wastewater Funding: EPA Loan and Grants program



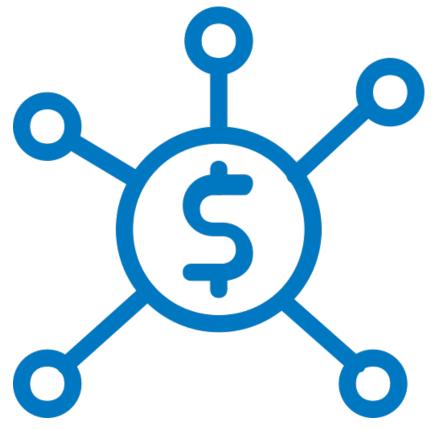
- Clean Water Act required additional treatment for POTWs (Publicly Owned Treatment Works)
- ✓ EPA stepped up with funding Construction Grants Program in 1970's
 - 75% Federal Grant
 - 10% State Grant
 - 15% local contribution
- ✓ These facilities are now close to 60 years old, and need to be re-built and rehabbed \$\$\$
- ✓ Funding is majority local contribution (low interest loans, like SRF)
- ✓ Most often repaid with rate increases or general obligation property taxes

Current Sources of Capital



- ✓ State Revolving Fund (SRF)
 - Can be paid back with revenue bond or GO bond
- ✓ USDA-Rural Development (RD)
- ✓ American Rescue Plan Act (ARPA)
- ✓ Bipartisan Infrastructure Law (BIL)
- ✓ Local Utility Revenue Bond
- ✓ Wastewater and Drinking Water Treatment Financial Assistance Program (WTFAP)
- ✓ Community Development Block Grant (CDBG)
- ✓ Water Infrastructure Finance and Innovation Act (WIFIA)
- ✓ Tax Increment Financing (TIF)





State Revolving Fund (SRF)



Eligible Projects

- Clean Water (CWSRF) Wastewater, Nonpoint Source, and Stormwater Projects that have a water quality benefit, Combined Sewers, Inflow and Infiltration reduction projects
- ✓ Drinking Water (DWSRF) Water Source, Treatment, Distribution, Storage, Interconnecting systems
- ✓ Ineligible Projects: Fire flow specific projects, upsizing water mains, dams, speculative growth

Key Features:

- Below market interest rates
- 20- or 30-year terms
- Requires a Municipal Advisor (MA) prepare a proforma
- 1.10 coverage factor for debt service payment
- Requires Environmental Review either a FONSI or CX (categorical exclusion)
- Requires an Engineering Report for planning
- Davis Bacon Wages
- American Iron and Steel (AIS)
- Some newer projects may require BABA YOUR VISION. ENGINEERED HERE.



State Revolving Fund (SRF)



Current Interest Rates: Effective 7/1/2024 – 9/30/2024

Planning & Design	Term (years)	Interest Rate	Servicing Fee	Total
3-year Balloon	3	0.00%	0.00%	0.00%

Standard Term	Term (years)	Interest Rate	Servicing Fee	Total
Tax Exempt	20	2.61%	0.25%	2.86%
Taxable	20	3.84%	0.25%	4.09%

Extended Term	Term (years)	Interest Rate	Servicing Fee	Total
Tax Exempt	21-30	3.61%	0.25%	3.86%
Taxable	21-30	4.84%	0.25%	5.09%

Source: https://www.iowasrf.com/loan-interest-rates/

Example: City of Grinnell, Iowa

M°CLURE™

NEW WATER TREATMENT PLANT, CLEARWELL, AND JORDAN WELL #10

EXISTING WELL #9

- ✓ Population 9,500
- ✓ Grinnell making \$40M investment in drinking water infrastructure
- ✓ Project Drivers:
 - Aging infrastructure
 - Drinking Water quality improvements (remove Radium, reduce chlorides at WWTP)
 - Growth new water tower south of town
- ✓ Project Overview:
 - New Jordan Well
 - New Raw Water Main
 - New Water Treatment Plant
 - New Water Tower

WATER SYSTEM IMPROVEMENTS 2023 GRINNELL, IOWA PROJECT NO. 2022000116-002, -003, -004, -005

COST ESTIMATE SUMMARY

#	PROJECT	Design Stage % Complete	Original Estimate from Preliminary Engineering Report	Current Estimate:	Notes:
-002	NEW JORDAN WELL #10	95%	\$3,270,000	\$3,253,000	HSLA Steel Casing
-003	NEW WATER TREATMENT PLANT	30%	\$21,000,000	\$24,724,000	One additional Membrane train added in preliminary design. Additional scope added at Well 7 and Well 8 to fix piping, flow meter, telemetry, and surge protection.
-004	NEW RAW WATER TRANSMISSION MAIN	60%	\$1,176,000	\$2 023 000	Finished water main added into project scope, additional raw water length added to avoid Broad St.
-005	NEW WATER TOWER	?	\$5,084,000	\$5,084,000	**Insert current estimate from V&K
	TOTAL CONSTRUCTION COST		\$30,530,000	\$35,084,000	
	ENGINEERING, LEGAL, ADMIN		\$5,069,000	\$5,250,000	
	TOTAL PROJECT COST		\$35,599,000	\$40,334,000	

EXISTING TREATMENT

EXISTING WELL #

NEW EMERGENCY

WATER CONNECTION

*Construction cost estimates above include contingency amounts based on % complete of the design. See the detailed cost estimates for contingency included with each project.



City of Grinnell, Iowa Capital Funding



- ✓ Capital Funding Plan for Grinnell:
 - Prepared by DA Davidson
- ✓ \$3M in Community Project Funding Federal direct appropriation

- Separate loans for each of the four project components
- Loan repayment combination of utility rates and GO
- GO repayment utilizing both LOST and TIF

	SOU	RCES AND US	ES OF FUNDS			
		CITY OF GRINNI Long-Term Asse	ELL, IOWA et Financing Plar	I		
Dated Date Delivery Date	08/02/2024 08/02/2024	10/04/2024 10/04/2024	01/10/2025 01/10/2025	01/10/2025 01/10/2025	06/06/2025 06/06/2025	
Sources:	Water Revenue Capital Loan Notes, Series 2024A (New Well - Part A)	General Obligation Capital Loan Notes, Series 2024B (Water Main) - Paid by LOST	General Obligation Capital Loan Notes, Series 2025A (Water Tower - Part C) - Paid by LOST	Water Revenue Capital Loan Notes, Series 2025B (Plant - Part D)	General Obligation Capital Loan Notes, Series 2025C (Plant - Part D) - Paid by TIF	Total
Bond Proceeds: Par Amount	3,941,000.00	2,202,000.00	5,914,000.00	19,914,000.00	5,754,000.00	37,725,000.00
ther Sources of Funds: Federal Funding				3,000,000.00		3,000,000.00
	3,941,000.00	2,202,000.00	5,914,000.00	22,914,000.00	5,754,000.00	40,725,000.00

✓ DWSRF Loan – 20 years

State Revolving Fund (SRF)



Top Considerations for Owners

✓ Work really hard to establish a final project scope at the Planning Stage.

-changes in project scope jeopardize review times and project eligibility

- ✓ Be aware of eligible project costs and ineligible project costs
- ✓ Loan Forgiveness is on a first come first serve basis and you won't be awarded loan forgiveness until after your project bids

-currently a max of \$2M of loan forgiveness for any one project

 Rate Increases – SRF will need copy of the ordinance before approving the construction loan



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USDA Rural Development (RD) Funding

Eligible Applicants

✓ Most of Iowa - Rural areas and towns with 10,000 populations or less

Eligible Projects

✓ Drinking water, wastewater, stormwater

Key Features

- Loan Terms: Up to 40-year term length with fixed interest rate
- Loan and grant funds are available
- Grant based upon financial need and project scope

Requirements

- Requires Preliminary Engineering Report (Iowa Supplement to PER)
- Environmental Assessment typically done by 3rd party of USDA (may meet categorical exclusions in some situations)
- Use of EJCDC Documents Specs, & ESA
- Application through RD-Apply (Requires Registration and E-Authorization)







USDA-RD Funding

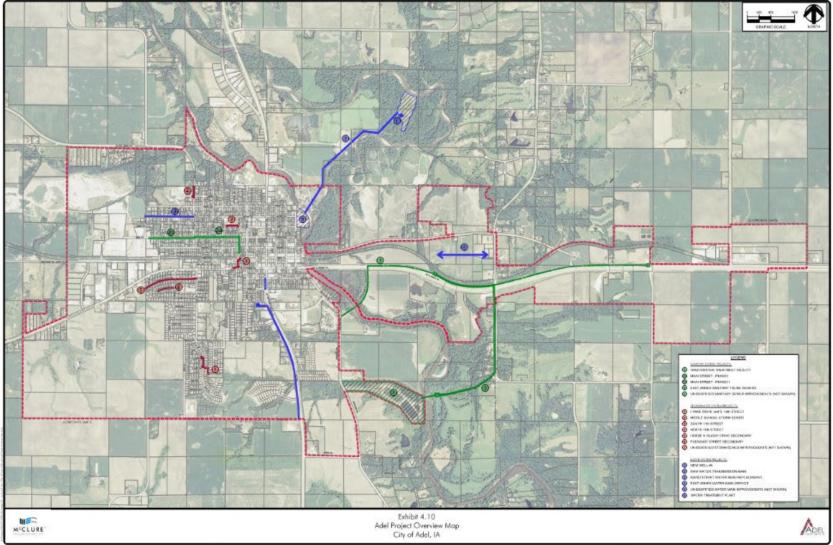


Funding Terms

- ✓ Up to 40-Years
- ✓ Interest rate is fixed once application is approved, and Letter of Conditions is issued
 - Rates can then never go up & may be reduced at loan closing
 - Interest Rate based on financial and project need
 - Poverty Level- MHI below 80% of State Non-metro MHI (<\$43,349) AND must solve a health/sanitary issue
 - Intermediate Level MHI is 80-100% of SNMHI (\$43,350 \$54,188)
 - Market Level MHI is > \$54,188
- ✓ Construction loan interim financing required for projects >\$500,000
- ✓ Current WEP Rates through September 30, 2024:
 - Poverty: 2.375%
 - Intermediate: 3.250%
 - Market: 4.00%

City of Adel Capital Funding





Capital Funding: City of Adel



	del - Water, Sew etter of Condition	23						
Water Utility Projects				1044 - 20				
USDA Letter of Conditions	Loan	Grant	Applicant Contribution	Total	Original Interest Rate	Int. Rate @ Closing	Weighted	Weighted Avg. Int. Rate
Water System Improvements - Phase 1 (Loan 1)	\$7,000,000	\$0	\$0	\$7,000,000	2.375%	1.125%	0.172	0.1949
Water System Improvements - Phase 1 (Loan 2)	\$9,603,000	\$2,302,000	\$0	\$11,905,000	2.375%	1.250%	0.236	0.295%
Water System Improvements - Phase 2	\$4,713,000	\$1,250,000	\$0	\$5,963,000	1.375%	1.375%	0.116	0.1599
Subtotal	\$21,316,000	\$3,552,000	\$0	\$24,868,000	0.0000000			
Sewer Utility Projects								
USDA Letter of Conditions	Loan	Grant	Applicant Contribution	Total	Original Interest Rate	Int. Rate @ Closing	Weighted	Weighted Avg. Int. Rate
Main Street Improvements (Sewer)	\$1,121,361	\$0	\$0	\$1,121,361	2.000%	2.000%	0.028	0.055%
East Annex Sewer	\$5,704,283	\$912,125	\$0	\$6,616,408	2.375%	1.750%	0.140	0.2469
Wastewater Treatment Plant	\$10,880,000	\$5,055,000	\$0	\$15,935,000	2.375%	1.500%	0.268	0.4019
Subtotal	\$17,705,643	\$5,967,125	\$0	\$23,672,768				
Storm Water Utility Projects								
USDA Letter of Conditions	Loan	Grant	Applicant Contribution	Total	Original Interest Rate	Int. Rate @ Closing	Weighted	Weighted Avg. Int. Rate
Phase 1 Storm Water Projects	\$1,635,000	\$0	\$24,000	\$1,659,000	2.375%	2.000%	0.040	0.0809
	Loan	Grant	Applicant Contribution	Total				
Combined Utility Totals -	\$40,656,643	\$9,519,125	\$24,000	\$50,199,768		L WEIGHTED COST O		1.431%

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USDA-RD Funding

Top Considerations for Owners

✓ Get registered with the RD on-line application E-authorization early.

-nice if your consultant is registered as well, can upload documents on your behalf

- ✓ Early contact with your area specialist helpful to understand grant opportunities
- ✓ No Davis Bacon requirements, but does require AIS and BABA
- ✓ Interim financing is required

-recommend SRF P&D Loan for planning and design costs

-work with your Municipal Advisor to determine most cost effective

 $\checkmark~$ Be patient and wait for re-pooling





Project Drivers

- ✓ Deteriorated Infrastructure
- ✓ Safety and Odors
- ✓ Operational Reliability
- ✓ Growth

Plant Treats on average 14 million gallons of water per day, and over 75,000 lb/day of BOD







1960's Original WWTP construction

1970's WWTP upgrade and expansion

2007 – 2013 WWTP upgrade and expansion





Proposed Phasing Strategy

Element	Phase 1 Existing WWTP Rebuild	Phase 2 Aeration Expansion and Solids Upgrades	Phase 3 Growth Driven Capacity Expansion
Direct Costs ¹	\$158,500,000	\$75,000,000	\$65,000,000
Design Contingency (30%)	\$47,500,000	\$22,000,000	\$19,000,000
Escalation	\$63,000,000	\$56,000,000	\$25,750,000
Subtotal	\$270,000,000	\$150,000,000	\$110,000,000
Engineering, Legal and Project Admin	\$30,000,000	\$20,000,000	\$15,000,000
Project Total	\$300,000,000	\$170,000,000	\$125,000,000

Notes:

1. Includes general conditions, contractor overhead and profit, and other markups (23%).

2. Costs are 2022 dollars, escalated to midpoint of construction (June 2026).

3. AACE Class 4 Level Cost Estimate.

4. Land acquisition costs not specifically included.

Financing Plan

- ✓ Combination of 20 and 30 year SRF Loans
- ✓ Looking at FEMA Hazard Mitigation and BRIC funding

How do you split costs fairly between domestic and industrial customers?



41%

Current WWTP Cost Elements

59%

INDUSTRY DOMESTIC





Current revenue contributions:

60% Residential / Commercial (~\$17 million annual) 40% Industrial (~\$11 million annual)



Financing Assumptions	30-year term, 3.0% interest	20-year term, 2.0% interest	30-year term, 3.0% interest	20-year term, 2.0% interest	30-year term, 3.0% interest	
			. ,			

Financing Plan

Approaches Evaluated

		Approach 1		Appro	oach 2	Approach 3		
		Phase 1	Phase 2	Phase 1	Phase 2	Phase 1	Phase 2	
Cost	Industrial	75%	75%	50%	50%	40%	75%	
Allocation	Residential & Commercial	25%	25%	50%	50%	60%	25%	
Financing Assumptions		30-year term, 3.0% interest	20-year term, 2.0% interest	30-year term, 3.0% interest	20-year term, 2.0% interest	30-year term, 3.0% interest	20-year term, 2.0% interest	

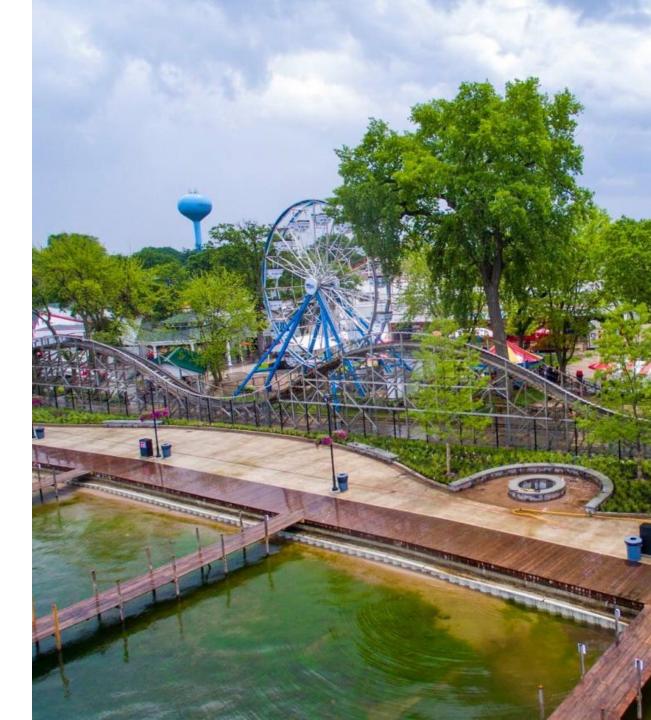
Iternatives Compa	arison				Approved Or	dinance
	Dor	nestic / Commer	rcial			E 0/
	Alternative 1	Alternative 2	Alternative 3	Al	Eff 7/1/23	5%
					Eff 1/1/24	25%
FY 24	5%	20%	35%		20%	
FY 25	3%	10%	15%		20%	
FY 26 and Beyond	3%	3%	3%		8%	



Industrial Rate Increase

Community Project Funding

- Congressionally-directed grants funded by the annual government appropriations (funding) legislation
- Rules and deadlines for CPF eligibility may change in future years, subject to the decision of the House Appropriations Committee
- Only state, local, tribal governments, publicly owned entities, quasi-governmental entities, and nonprofits are eligible
- ✓ Typically, each member receives \$20-22 million across their district
- ✓ Each representative may submit up to 15 projects



Community Project Funding

Key Features and Requirements:

- ✓ Geographic distance can't all be in metro areas
- ✓ Only one project per city
- ✓ Water projects address things before they become a problem
- Regional infrastructure does a project impact multiple counties?
- ✓ Shovel ready
- Must be able to show community support

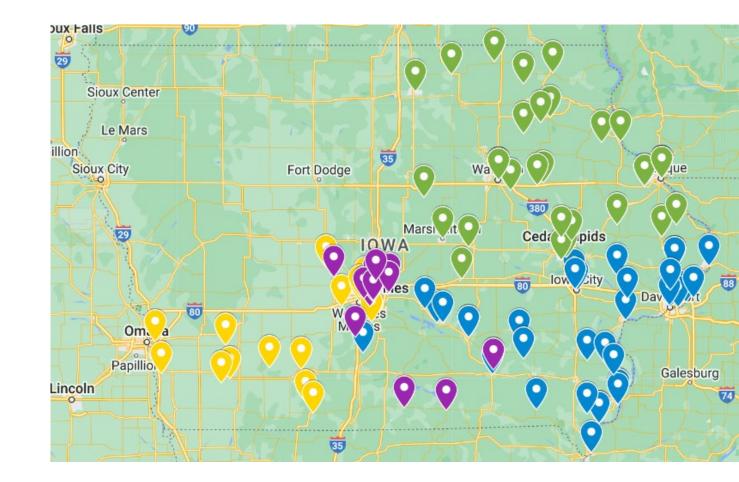


Community Project Funding



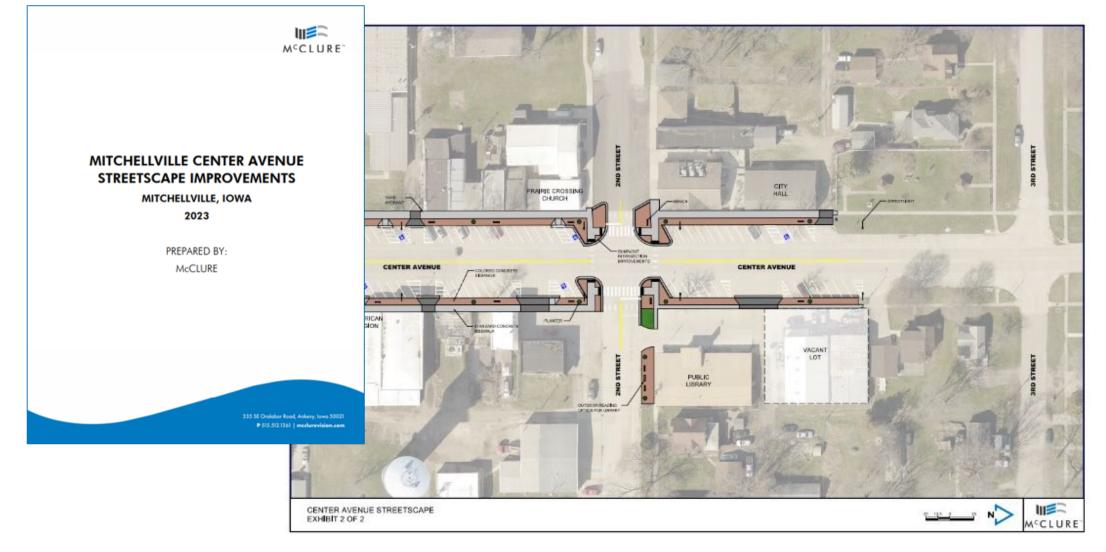
✓ Department of Transportation

- Highway Infrastructure Projects and Consolidated Rail Infrastructure and Safety Improvements
- ✓ Housing and Urban Development (HUD), Community Development Block Grant (CDBG), Economic Development Initiatives (EDI)
 - Local road infrastructure not otherwise eligible as a CPF in Highways (in this bill)
 - Streetscape improvements



City of Mitchellville, Iowa





USDA Rural Development

Essential Community Facility

An essential community facility is defined as a facility that provides an essential service to the local community for the orderly development of the community in a primarily rural area, and does not include private, commercial, or business undertakings.



Community Facilities Direct Loan and Grant Program



- ✓ Funding to develop essential community facilities in rural areas
- ✓ Rural areas with less than 20,000 people are eligible
- ✓ Funds can be used to purchase, construct, and/or improve essential community facilities, purchase equipment and pay related project expenses
 - This includes street improvements
- ✓ Communities of 5,500 or less or those with a median household income below 80% of the state nonmetropolitan median household income receive priority points
- ✓ Grant percentage is based on population and median household income and may be a maximum of 75 percent of project costs
- ✓ Open year round

State Opportunities: Iowa DOT



	PPLICATION DEADLINE 🔶	ELIGIBLE PROJECTS
Is and Bus Facilities (Section 5339) Fin	irst business day in May	Public Transit Agency
t <u>y Bridge Program</u> Oo ap	pplication deadline is October 1, however pplications may be ubmitted at any time.	Road, Street and Bridge
ongestion Mitigation/Air Quality Program (CMAQ) Fin	irst business day in May	Public Transit Agency
ounty Highway Bridge Program No	lo application deadline	Road, Street and Bridge
ountv-State Traffic Engineering Program (C-STEP)	etters of request accepted Il year	Traffic Safety and Engineering
DT/DNR Fund ac or	etters of request are ccepted all year and, if elected, are funded in the rder in which they are eceived	Trails and Enhancement
hanced Mobility of Seniors and Individuals with Disabilities Program (Section 10) Fin	irst business day in May	Public Transit Agency
deral Airport Improvement Program (AIP)	lecember	Aviation

Source: https://iowadot.gov/grants-programs

State Opportunities: Iowa Economic Development Authority



- Destination lowa: Helping communities advance a sense of place and tourism
- Center for Rural Revitalization: Investing in, growing, and connecting rural Iowa
- Enhance lowa: Assist projects that provide recreational, cultural, entertainment and educational attractions, as well as sports tourism
- ✓ Downtown Revitalization Fund: Rehabilitate blighted downtown buildings
- ✓ Downtown Housing Grant: Financial assistance for projects that support local downtown revitalization
- Historic Preservation Tax Credit: Tax credits to developers who sensitively rehabilitate historic buildings to offer them new life

- Reinvestment Districts: Grants to community leaders to fund large-scale projects including new retail establishments and new lessors
- Nuisance Property & Abandoned Building Remediation Loan Program: Financial assistance to help communities demolish or remediate buildings
- Redevelopment Tax Credits: Tax credits for redeveloping brownfield and grayfield sites
- Opportunity Zones: Tax incentives to encourage long-term, private investments in low-income census tracts



State Opportunities: Iowa DNR



- All-Terrain Vehicle (ATV/OHV) Grant Program
- Bluffland Protection Revolving Loan Fund
- Community Forestry Grant Program
- Fish Habitat Promotion for County Conservation Boards
- Iowa Water Trails Mini Grants
- Low-head Dam Public Hazard Program
- Land and Water Conservation Fund (LWCF)
- Natural Resources and Outdoor Recreation Trust Fund (aka Sustainable Funding)
- On-Stream Impoundment Restoration Fund Grant Program
- Outdoor Recreation Legacy Partnership (ORLP)
- REAP City Parks and Open Spaces Grant Program
- REAP Conservation Education Program
- REAP County Conservation Grant Program

- Shooting Sports Archery and Shooting Range Grant Program
- Snowmobile Trail Grant Program
- Solid Waste Alternatives Program (SWAP)
- State Comprehensive Outdoor Recreation Plan (SCORP)
- Water Recreation Access Cost-Share Program
- Watershed Improvement Grants (Section 319)
- Wildlife Habitat With Local Entities Grant Program (Wildlife Habitat Grant)
- Wildlife Diversity (non-game) Program Grants





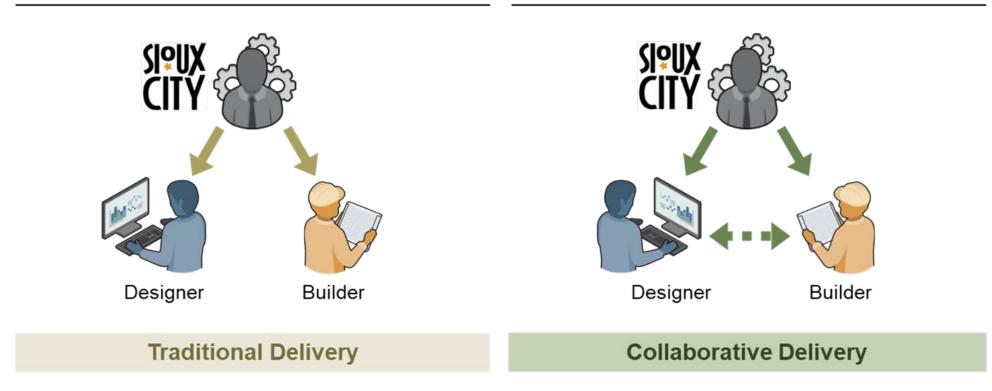
• Chapter 26A of Iowa Code, effective July 1, 2022

1. "Construction manager-at-risk" means a sole proprietorship, partnership, corporation, or other legal entity that assumes the risk for the construction, rehabilitation, alteration, or repair of a project and provides consultant services to the government entity in the development and design phases, working collaboratively with the design professionals involved.

 "Guaranteed maximum price contract" means the agreed to fixed or guaranteed maximum price pursuant to a contract entered into by the construction manager-at-risk and the governmental entity.



Design-Bid-Build (DBB) Construction Management At-Risk (CMAR)





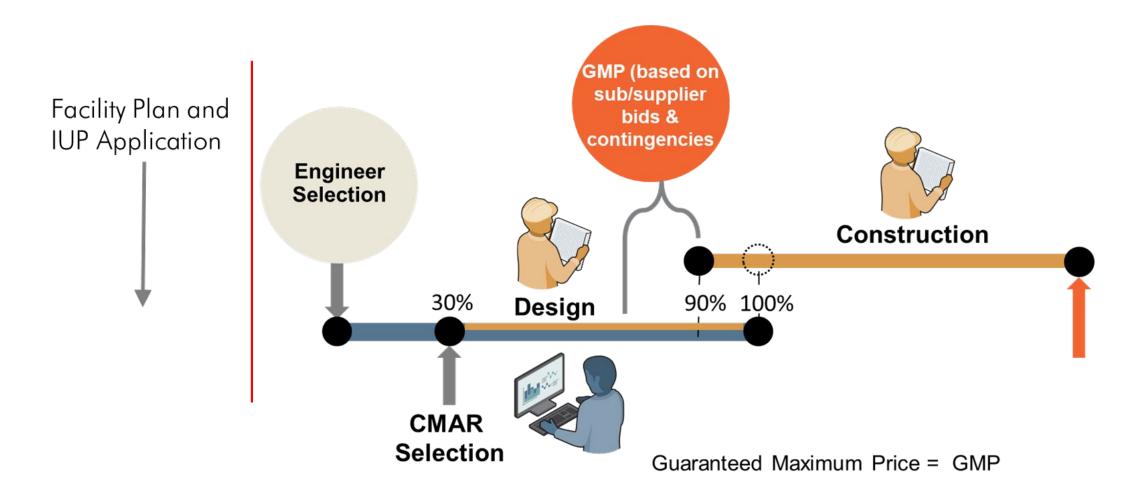
Benefits

- Qualifications based selection of CMAR firm
- ▲ Similar roles/responsibilities to DBB
- Ability to design to budget with CMAR cost input during design
- Contractor early input on constructability, cost, and VE ideas
- Opportunity for Owner input throughout project to GMP
- Owner maintains "off-ramp" option to bid without significant project delays

Challenges

- Limited familiarity with CMAR in lowa
- Construction cost is not known at the time of initial contract signing, but CM provides cost input early
- GMP includes VE savings but is negotiated and initially may not be lower than DBB
- CM has fee for oversight, but involvement in design limits risk of change orders







- Chapter 26A of Iowa Code lays out the following steps and requirements for a Public Owner to select a CMaR:
 - Step1. Issue Request for Qualifications (RFQ)
 - Step 2. Open RFQs and evaluate according to selection criteria
 - Step 3. For each contractor who meets qualifications, send a Request for Proposal (RFP)
 - Step 4. Open RFPs, rank each proposal according to criteria
 - Step 5. Negotiate contract with top ranked CMaR

Questions?

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