



PLANNING



DEVELOPING PROJECTS AND PREPARING TO OBTAIN FUNDING

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PART 1: MAJOR STEPS IN THE FUNDING PROCESS

GOOD STARTING PLACE: DO YOU HAVE A
PROBLEM THAT NEEDS SOLVED?

WOULD ADDRESSING THAT PROBLEM IMPROVE
SERVICE TO YOUR CUSTOMERS?

IS THERE DATA TO BACK UP THE NEED
FOR YOUR PROJECT?

IF THERE IS A PROBLEM THAT NEEDS SOLVED,
DO YOU KNOW THE BEST WAY TO SOLVE THE
PROBLEM?

WILL SOLVING THE PROBLEM INVOLVE THE
ADDITION OF ASSETS (E.G., CONSTRUCTION)?

IS THERE A NON-ASSET WAY TO SOLVE
THE PROBLEM?

WILL YOU NEED TO ENGAGE OUTSIDE PROFESSIONALS, INCLUDING ENGINEERS, TO HELP YOU PLAN FOR THE PROJECT, DESIGN THE PROJECT, OR CONSTRUCT THE PROJECT?

CAN YOU AFFORD TO PAY FOR THE PROJECT YOURSELF (OUT OF YOUR RESERVES OR OTHER INTERNAL FUNDS)?

WILL YOU NEED TO SEEK OUTSIDE
FUNDING?

DO YOU NEED TO BUILD INTERNAL CAPACITY
TO QUALIFY FUNDING, ACCOMPLISH THE
PROJECT, OR ACHIEVE SUSTAINABILITY ?

BASIC STEPS

Identify the Need for the Project



Make Sure the Need Includes Addressing Customer Service in Some Way



Use Data to Back Up the Need



Identify the Best Way to Solve the Problem (including non-asset solutions)



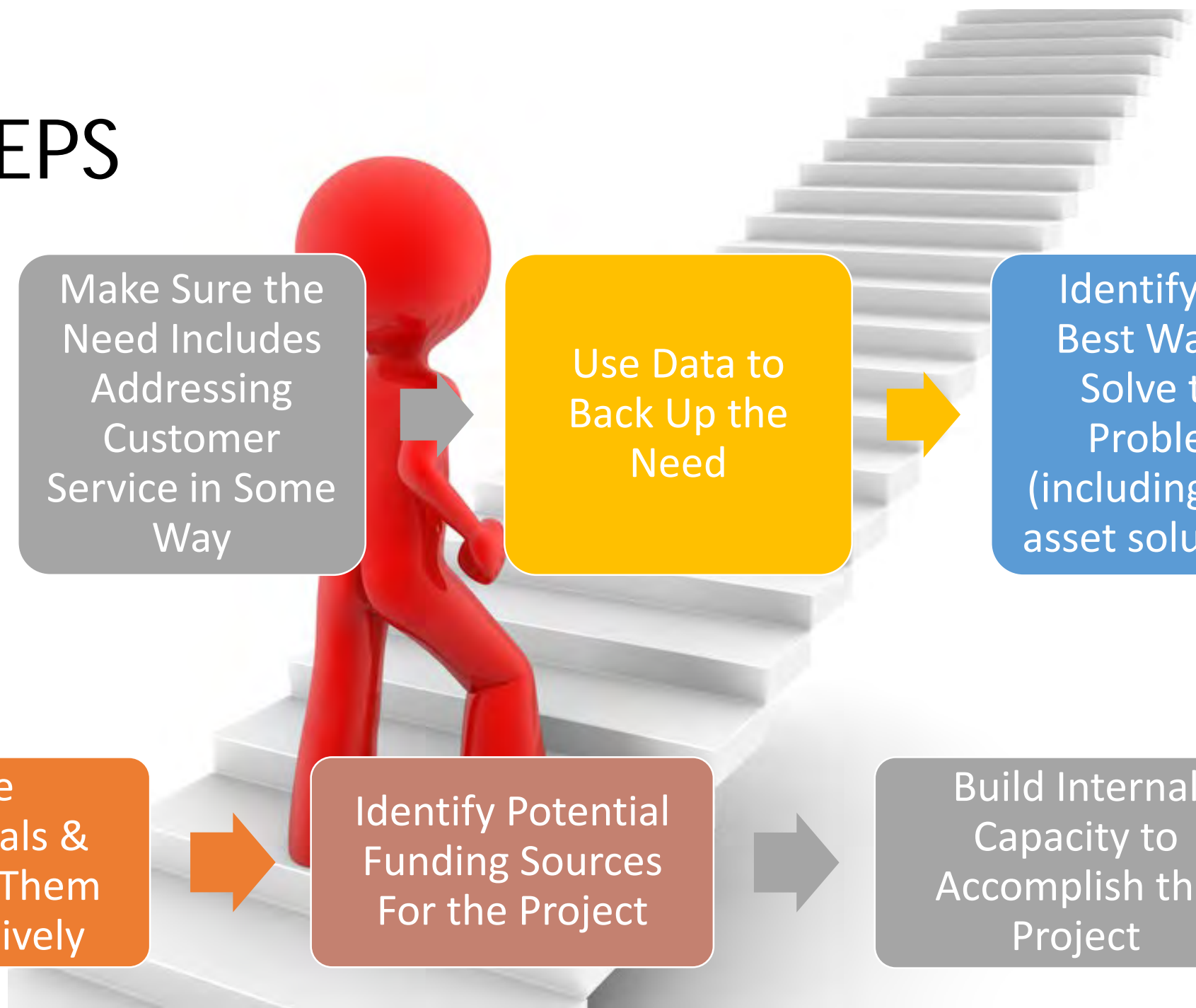
Engage Professionals & Work with Them Collaboratively

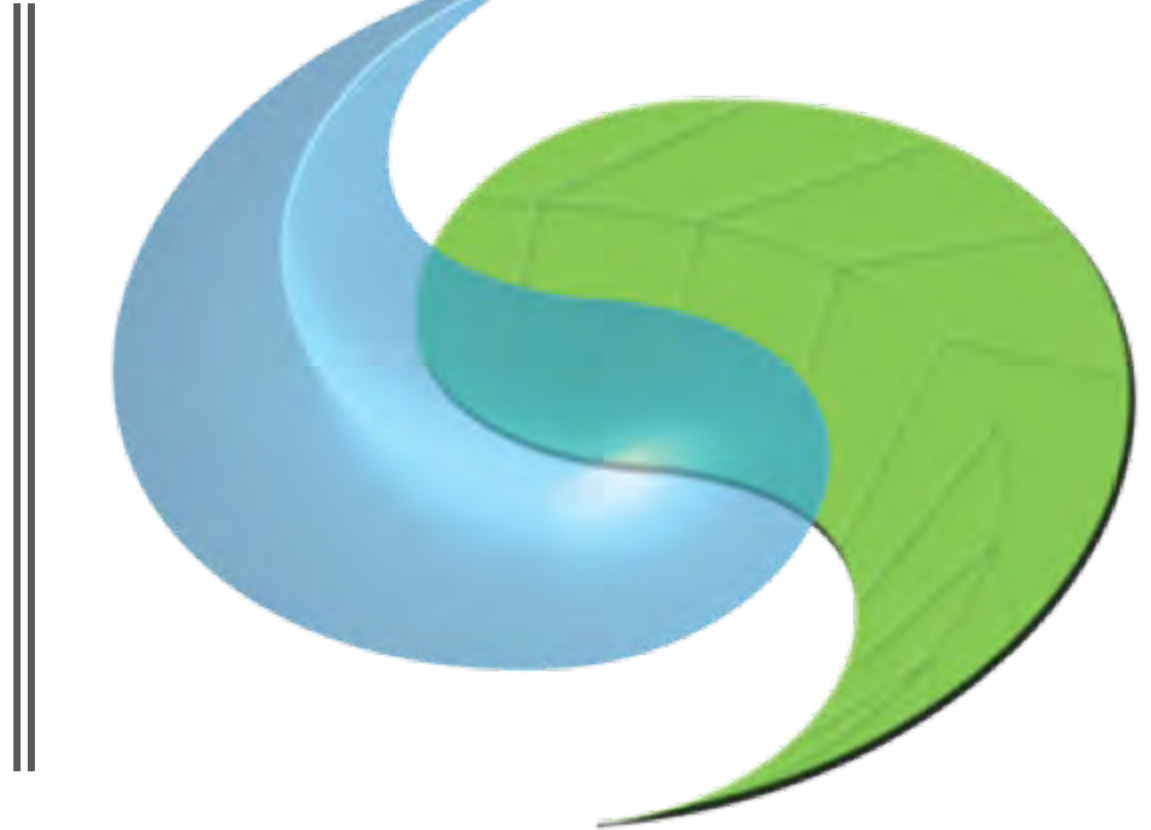


Identify Potential Funding Sources For the Project



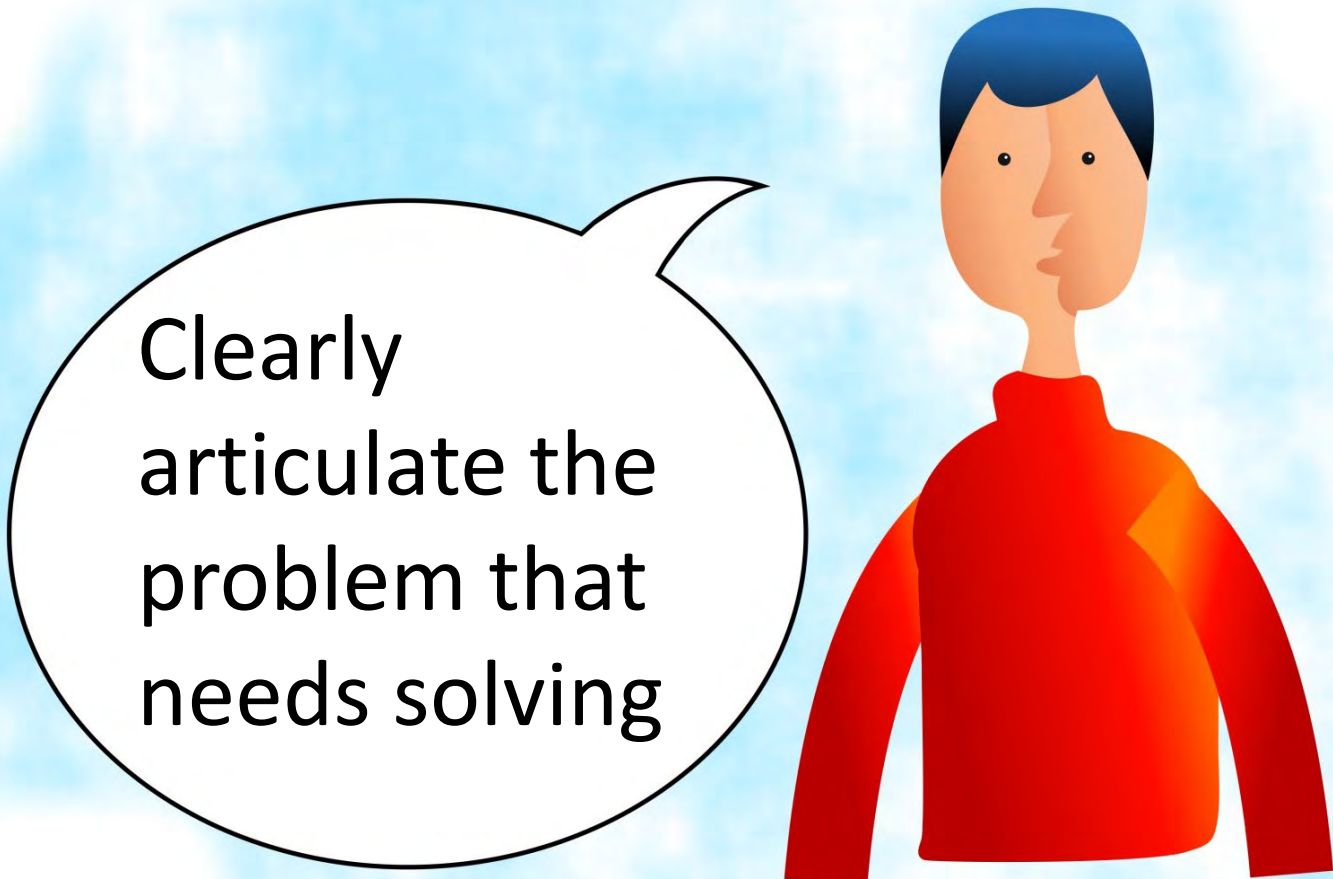
Build Internal Capacity to Accomplish the Project






PART 2: IDENTIFY THE NEED FOR THE PROJECT

What problem are you trying to solve?



Clearly
articulate the
problem that
needs solving

What problem are you trying to solve?



Clearly
articulate the
problem that
needs solving

If you can't articulate it well internally, it will be very difficult to explain the project to anyone else, especially the funders. It is also difficult to develop RFPs for planners, engineers, or other professionals when the project is not well defined.

Clearly identify & articulate: What are the risks of not doing the project? What are the benefits of doing it?



Consider all Three Categories

Do the benefits include improving service to your customers in any way?

If not, should the project proceed? Why is the project being done, if customers don't benefit?

If yes, in what way do customers benefit?

A few words about customer service...

Water utilities are first and foremost customer service businesses



Everything you do should be about the customers

The service we provide our customers is called:



Level of Service

Goals

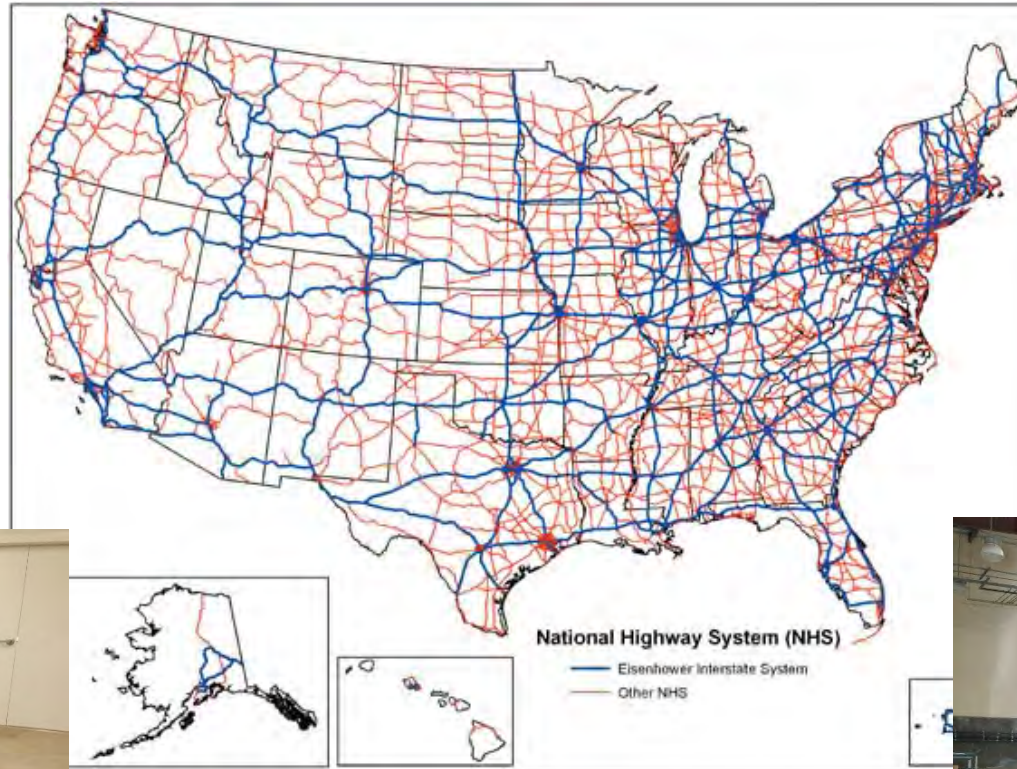


1.

2.

3.

Level of Service is the Roadmap to Where You're Going & How You'll Get There





Why are we talking about Level of Service and Level of Service Goals as part of funding infrastructure projects?



LOS

Level of Service

Whether and how the new project effects customer service levels is important.

If the project has no positive impact on LOS, is it the right project?

POSITIVE IMPACT



LOS

Level of Service

It's important to think about the project cost compared to the increase in customer service. Are the customer improvements worth the cost?



We want to be able to tell our customers what they will receive as a benefit of the project. They are paying, what are they getting?

The water quality will improve because...

We will now have fire flow

We're replacing a pipe to prevent future breaks

We have more water to cover drought situations



We're providing service to those who didn't have it

Help Setting LOS Goals



LEVEL OF SERVICE

Guidelines, Categories and Example Goals

Guidelines

The Level of Service Goals should define what your customers and employees can expect from the water utility. When customers understand what the utility is providing for them in terms of service and they are given a say in what the utility may provide in the future, they are more willing to pay. Customers need to understand that service is related to cost and typically the higher the level of service desired, the higher the costs associated with producing that level of service. Determining what the customer wants and is willing to pay for drives the decision making for the utility.

When defining your level of service goals, remember to write SMART goals – Specific, Measurable, Attainable, Realistic and Time Bound (when appropriate). This will allow the utility to track its performance, show successes and failures and revise for improvement each year. Goals can be changed or adjusted over time. Goals can also be added or removed from the list.

It's important to involve customers and staff in the process of establishing the goals or service levels. The goals can be either internal or external. External goals are those that directly impact the customers. Internal goals are those that are related to operations and that would not be easily understood by customers. Progress towards meeting the goals should be tracked and reported to upper management and the public.

Determining your Level of Service goals should not be overwhelming. Keep it simple; develop 10 – 12 goals around the most important aspects for your utility. The information below can be used as a resource in setting your utility's goals.

<https://swefc.unm.edu/home/resource/level-of-service-guidelines-categories-and-example-goals-for-water-systems/>





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PART 3: USE DATA TO BACK-UP THE NEED

Key Questions



What data backs up the need for the project?

Is the data compelling?

Would it be compelling to a funder?

Do we need to collect more data? Should we look at different data?

Key Questions

What data

Is the data c

Would it be c

Do we need to
data?

EXAMPLE



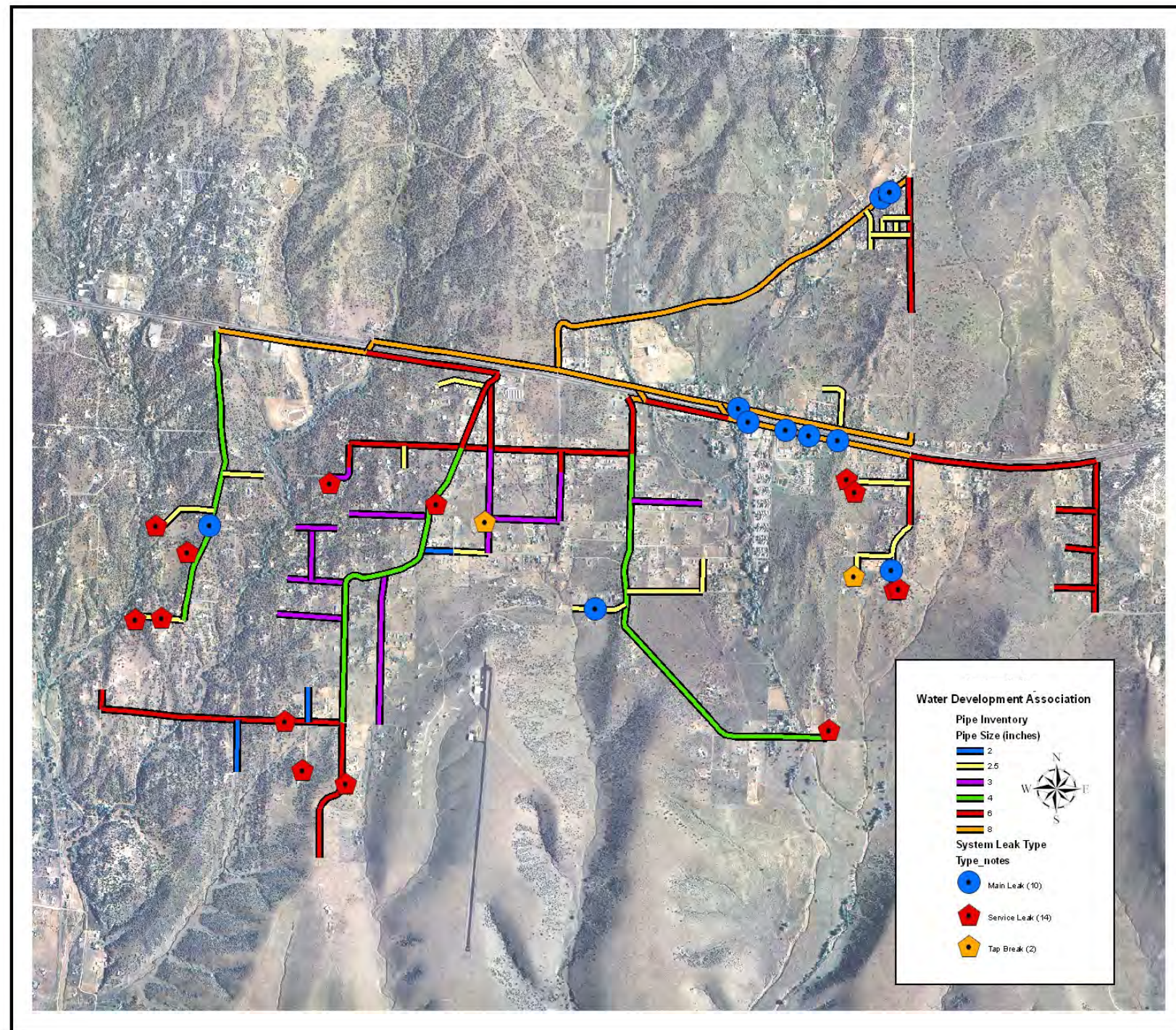
Small Community: Was Seeking Funding from State Sources for a \$5 M Pipe Replacement Project



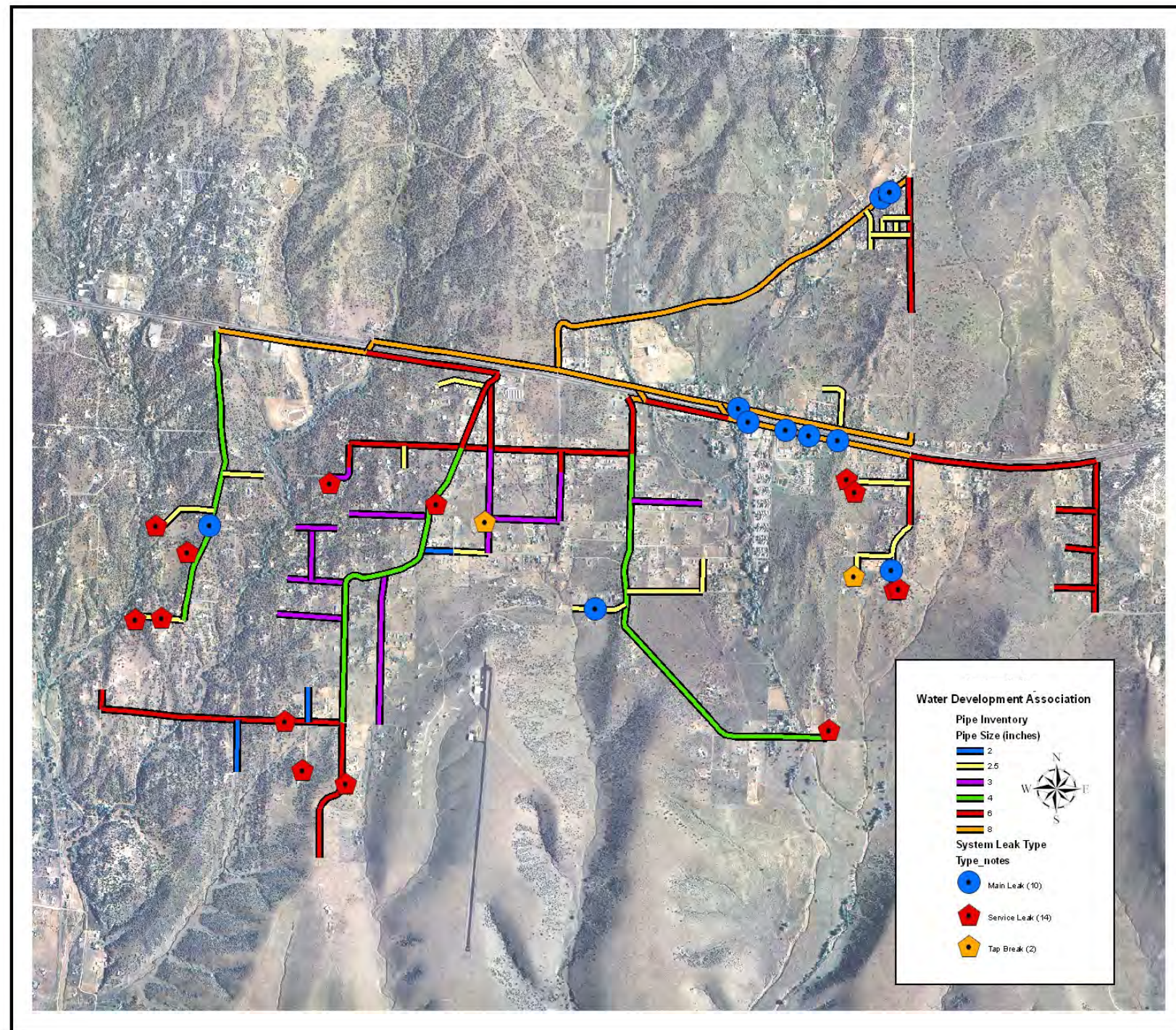
Do they really need the project?



What did the data show?

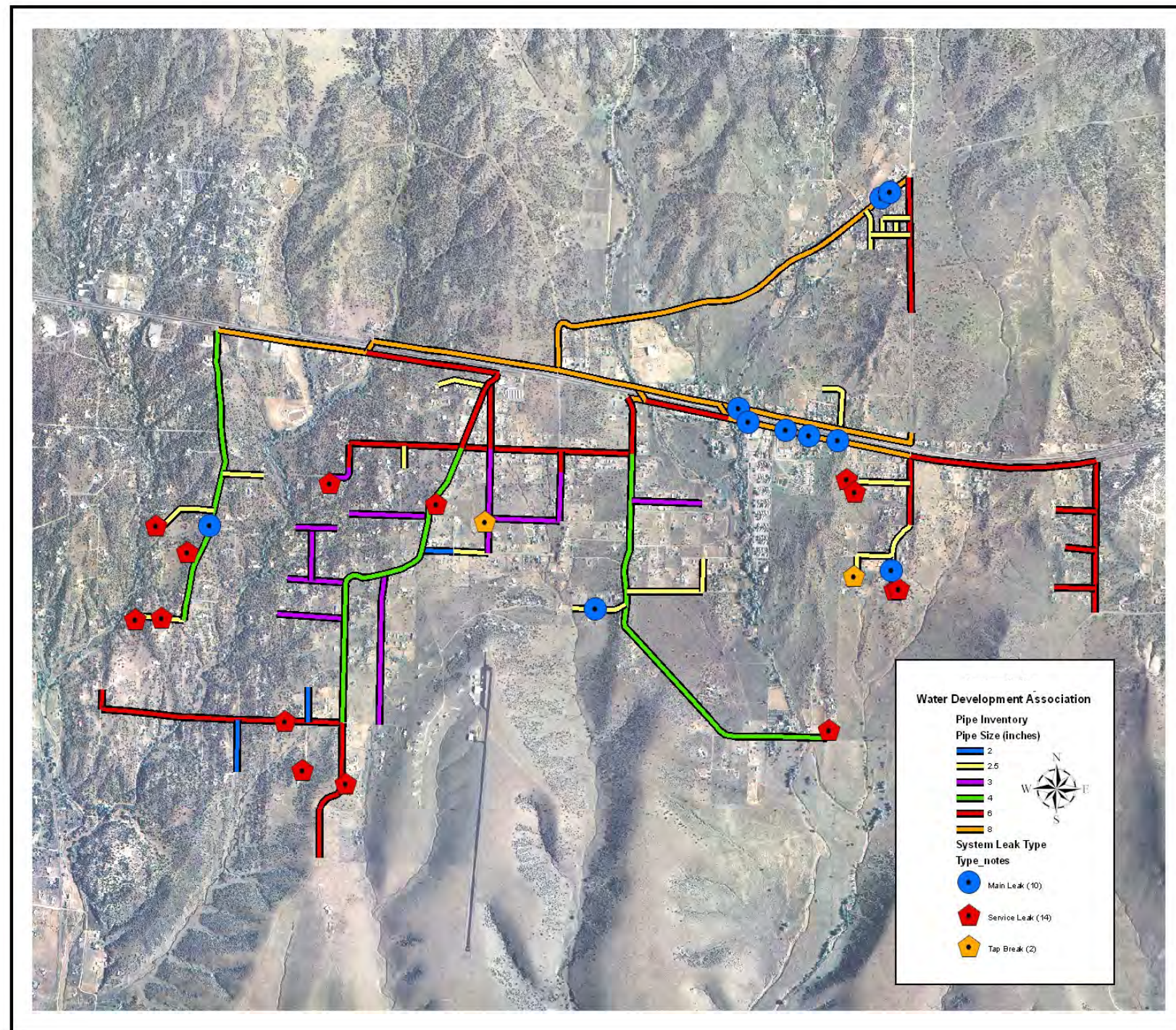


What was the outcome?



The use of data
saved the
community
\$4.95 Million

Data can be
your friend!!





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PART 4: EXAMINE ALL ALTERNATIVES, INCLUDING NON-ASSET

Three Options at early stages....

Project addresses a problem backed up by data, improves customer service. Move to the next step

Project not well-defined and/or backed up by data. Costs not justified based on customer service improvements. Project not quite right or doesn't address the right issues.

Project not needed. Data shows its not necessary. Or it is not the right time to do the project. Project should not go forward.

If Project addresses the correct issues....

Project addresses a problem backed up by data, improves customer service.
Move to the next step

What are possible ways to address the issue? (Alternatives)

Is there a non-asset solution?

Let's try an example

Green Village wants a third well to provide additional capacity for the system. There is a large per capita water usage in town (125 gpcd) and it is much higher than neighboring systems (80 gpcd on average). There is also a relatively high water loss in the system. The water system manager is afraid the system won't be able to keep up in the future.



Key Questions



Based on the information at hand..

What alternatives might exist to address the need?

Is construction the only option or could maintenance be done?

Are there any non-asset solutions?

What types of **construction** alternatives could be considered for the project (asset solutions)?

Project addresses a problem backed up by data, improves customer service. Move to the next step

Examples:

Surface source vs. well

Well locations

Which Aquifer(s)

Size of Well (2 smaller verses one bigger?)

What types of **maintenance** alternatives could be considered for the project (asset solutions)?

Project addresses a problem backed up by data, improves customer service. Move to the next step

Examples:

Well cleaning/rehabilitation

What **non-asset solutions** could be considered for the project (asset solutions)?

Examples:

Project addresses a problem backed up by data, improves customer service. Move to the next step

Customer conservation programs to reduce use

Rebate program to install low-flow devices

Are there large commercial users that drive up gpcd that could become more efficient?



A Few Words About Alternatives Evaluation

How are alternatives
chosen?



Is it by the engineer only?

Do operators or managers get
to input into the process?

Do you get to see an initial
list to comment on it?

Are all viable alternatives considered? Or only certain types of alternatives?



Are alternatives suggested by operators or managers given serious consideration?

Are all alternatives given equal consideration or is one alternative pre-ordained?



Sometimes it might seem like a good idea to pick an alternative right from the start and go with it (either the one the system wants or the one that the engineer wants)

Resist this temptation!! Let the process determine the best alternative using data, costs, overall long-term, life cycle considerations

Are the long-term costs of the alternatives taken into consideration or just the initial costs?



In particular, are the following considered:

- O&M Costs over time
- Short & long-term replacement
- energy use/energy efficiency
- water use/water efficiency
- Source water protection

Are new technologies considered or just standard technologies?



If new technologies are considered, are you given examples of utilities using the technology? Are you given a chance to speak to these utilities about their experiences?

What does the write up of the alternatives look like? Are they written up as if all were considered equally?



What does the costing portion look like? Were all alternatives given the same level of costing?

A few examples:

A water system that was given a reverse osmosis system when it was not needed.

A tank rehab over a tank replacement.



A system whose alternative evaluation process ignored cheaper, better alternatives; had to be rejected by the SRF agency during review

One Area of Concern: Alternatives Evaluation



A water system in which the engineer located the storage tanks at elevations that would not work. The head operator had pointed this out during design but was ignored. It cost considerable dollars to fix this problem later.

A system whose engineer designed a disinfection system that was operationally impossible for the operator (entry way too small). Got changed later.

Key Questions



Based

Why is it so important to consider these issues early in the process?

What

Is construction the only option or could maintenance be done?

Are there any non-asset solutions?

Consider the cost/influence relationship

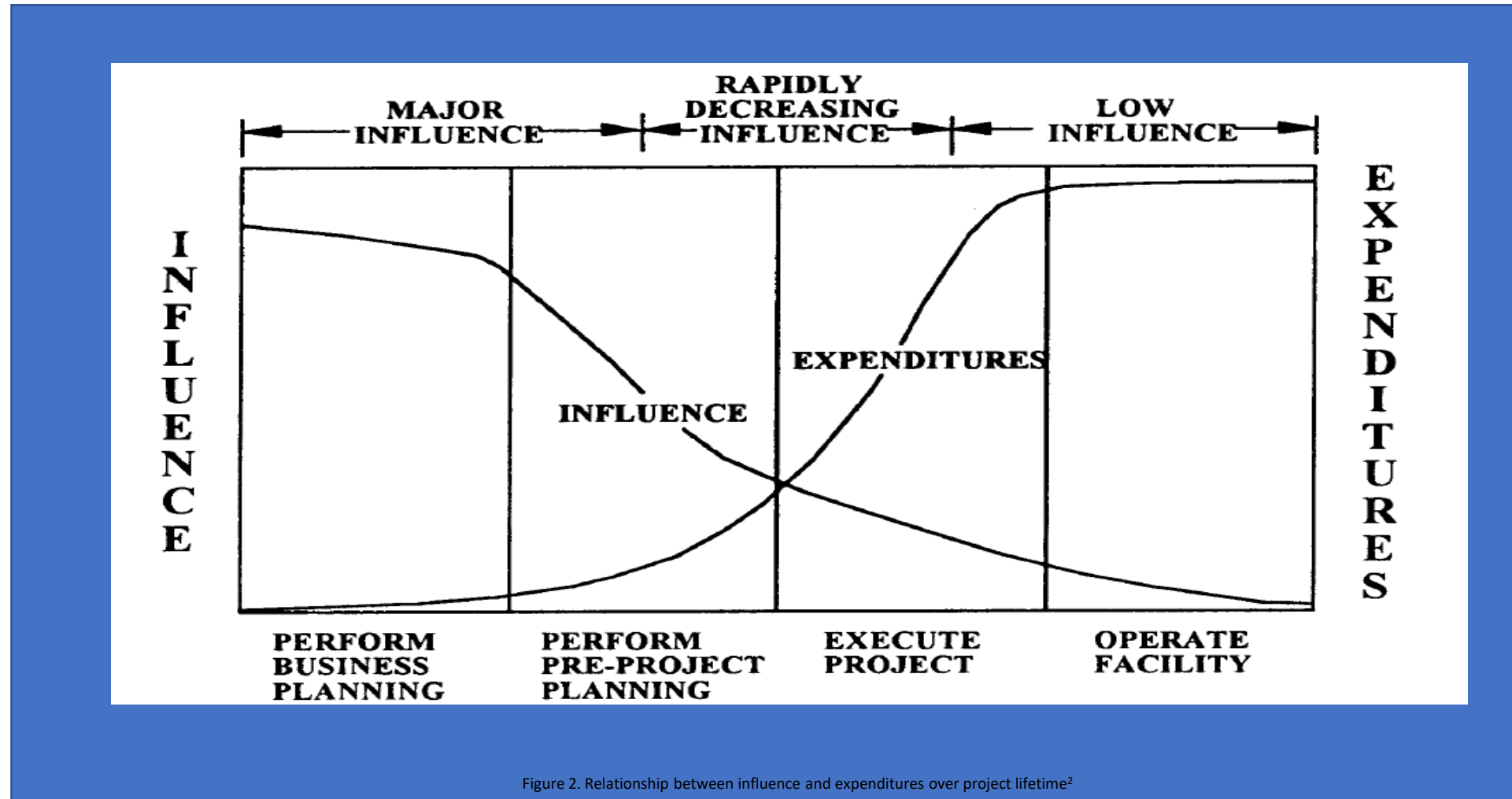


Figure 2. Relationship between influence and expenditures over project lifetime²

Initial Planning: Most Influence For The Least Cost

Need to determine best alternatives at this point, not later in the process

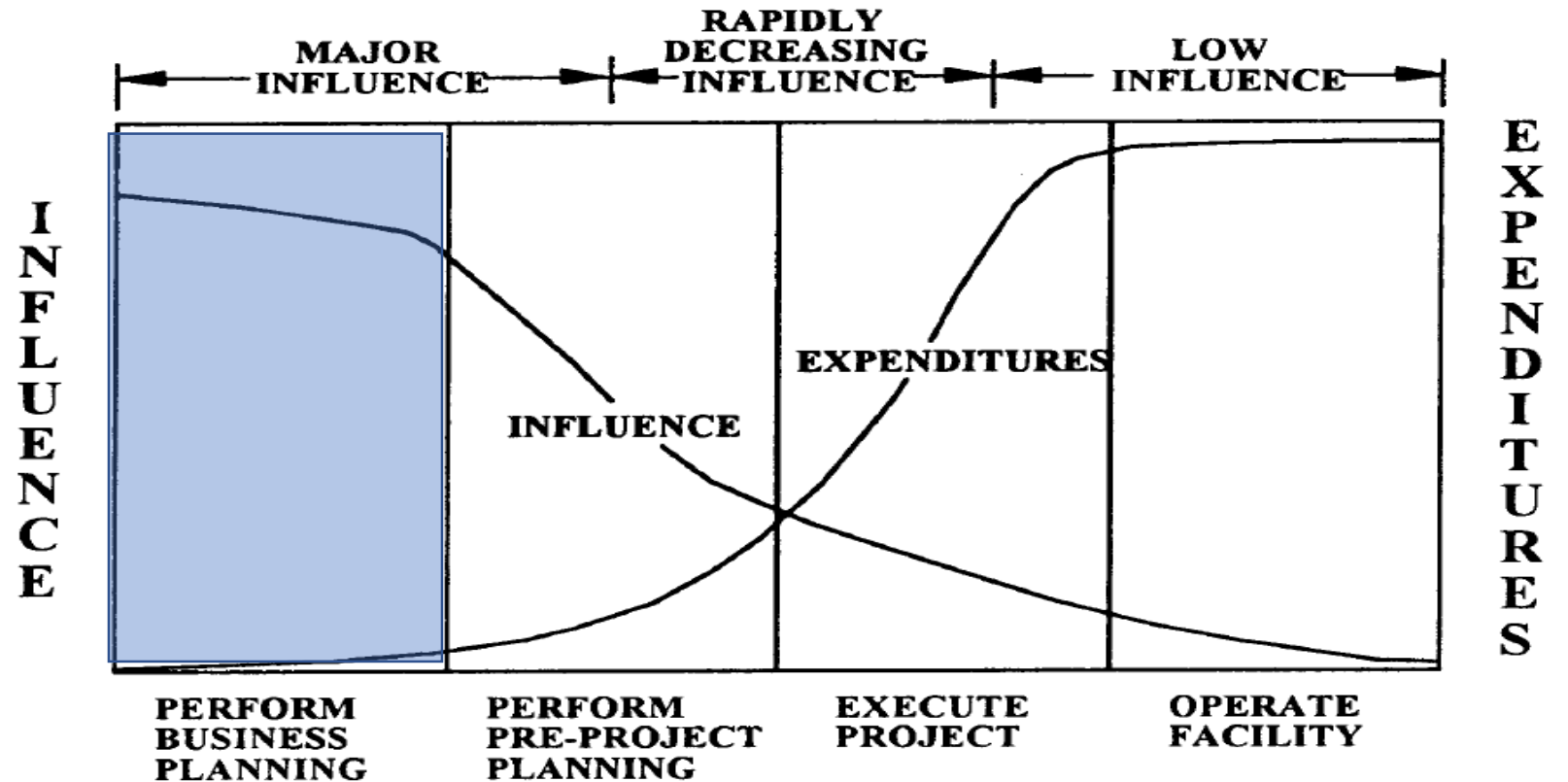


Figure 2. Relationship between influence and expenditures over project lifetime²

What about projects in the second category....

Project not well-defined and/or backed up by data. Costs not justified based on customer service improvements. Project not quite right or doesn't address the right issues.

What is the problem with the project? Is there a better way to address the issue?

Is the project missing something?

Are regulatory issues not being addressed?

What would improve the project?

What about projects in the second category....

Project not well-defined and/or backed up by data. Costs not justified based on customer service improvements.
Project not quite right or doesn't address the right issues.

Think back to our example: Should Green Village be considering a water loss reduction project instead of a new well?

Should pipe replacement, meter replacement or some other project be done instead of the new well?

What about projects in the second category....

Project should be revised. Not quite right or doesn't address the right issues.

The most important thing is that the best project proceeds

What about projects in the final category....

In these cases, it is not the right time to move forward, put the project off

Project not needed. Data shows its not necessary. Or it is not the right time to do the project. Project should not go forward.



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**PART 5: ENGAGE PROFESSIONALS & WORK WITH THEM
COLLABORATIVELY**

Recall the best time to intervene in projects to reduce costs and have the greatest impact is during pre planning or design

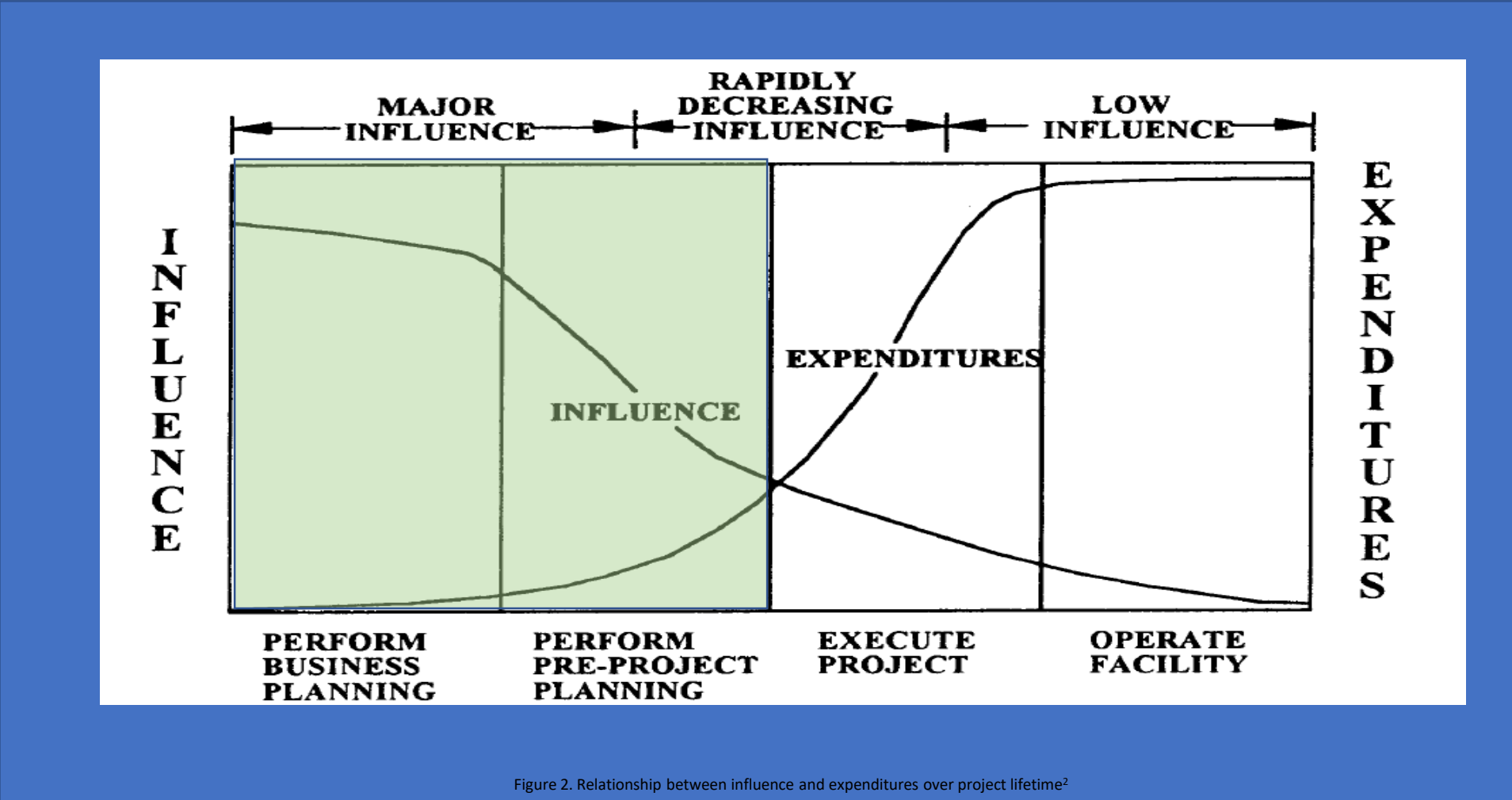


Figure 2. Relationship between influence and expenditures over project lifetime²

By the time construction starts, it's very difficult and expensive to change things

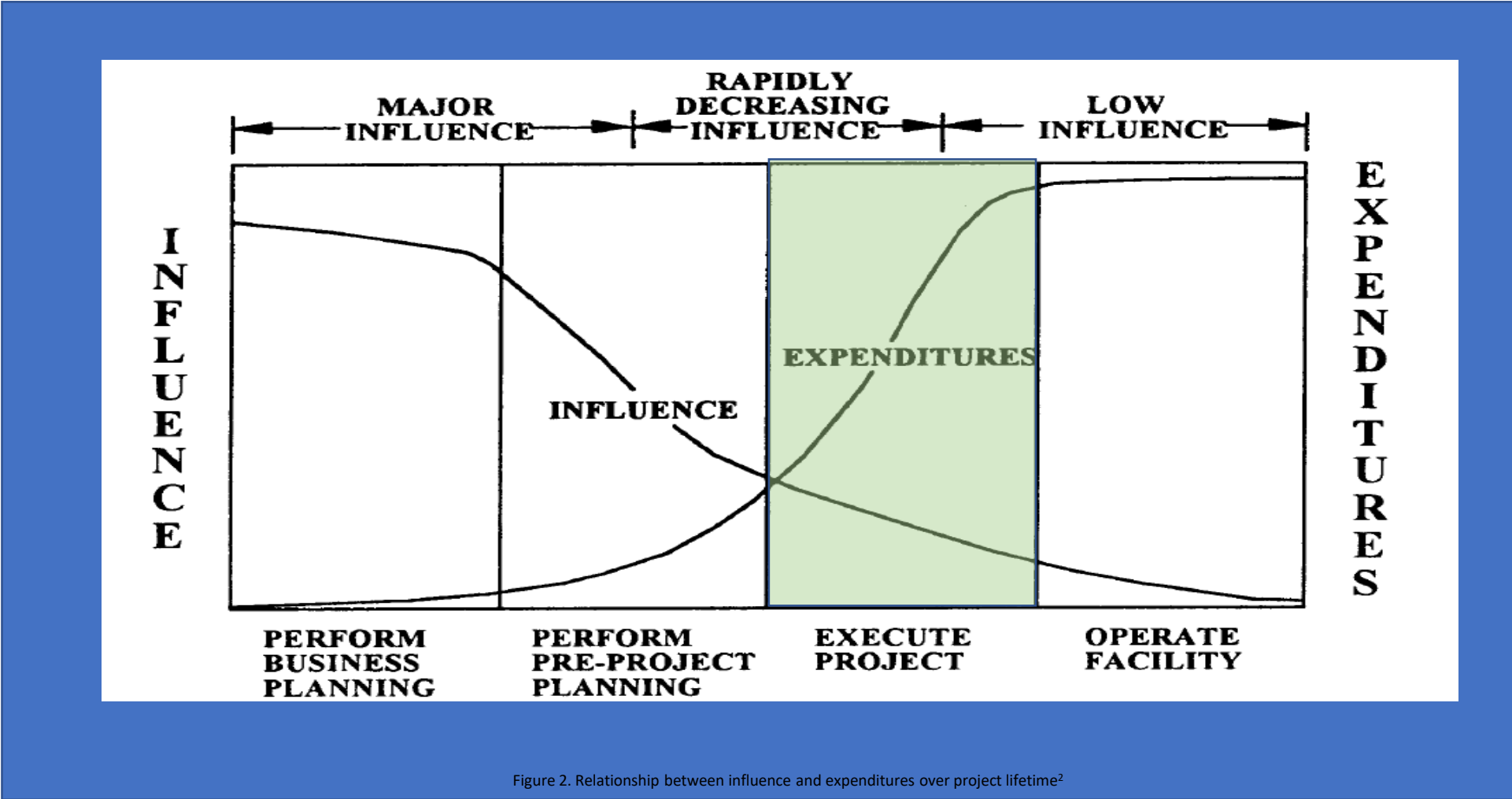


Figure 2. Relationship between influence and expenditures over project lifetime²

By the time the facility is turned over to operations, most of the costs are sunk

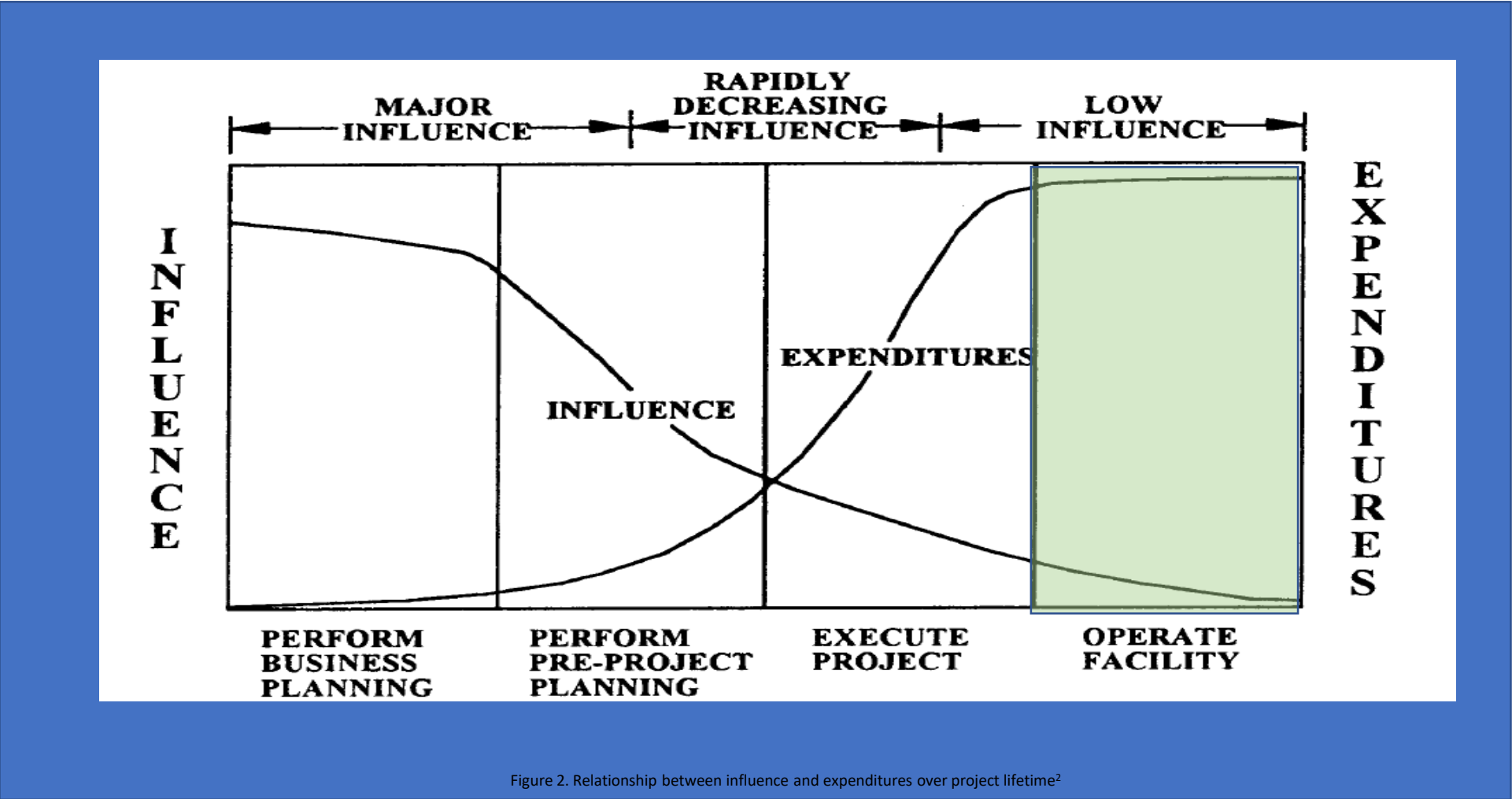


Figure 2. Relationship between influence and expenditures over project lifetime²



If your project involves construction, you will typically need outside professionals

Two Issues:



1) Engaging the Professionals

2) Working Collaboratively With Them

The RFP

Most of the time, we use an RFP to engage professionals

The RFP

Some Key Thoughts:

Make sure the scope of the work is **WELL-DEFINED**

The RFP

Some Key
Thoughts:

Have clearly
thought-out
selection criteria
& **USE THEM**

The RFP

Some Key
Thoughts:

Make sure the
RFP review team
is diverse

The RFP

Some Key Thoughts:

Keep an open mind during selection;
Choose the **BEST CHOICE** for you, not the one you know the best

The RFP

Some Key Thoughts:

Avoid promising the design for help with the application; you want an independent selection process

The RFP

Some Key Thoughts:

Indicate in the RFP that you want a collaborative relationship with the engineer



Design and operations are
inextricably intertwined: The
best design won't achieve its
intended purpose without good
operations





Likewise, the best operations
will not fix a poor design





It is extremely important to think through operations as an integral part of design



Therefore, we
want to be able
to have a good
relationship with
the engineers



An Analogy: You are Building a House

Do you let someone else decide where the house is going to be built? Or are you involved in that decision?

Will you let the architect or designer decide how many bedrooms, where the kitchen is, what it looks like, etc?

Will you want to have input into items like the number of sinks, what type of cabinets, etc?

Why is it necessary to work collaboratively with the home builder?

An Analogy: You are Building a House

Will you want to

Do you
else of
the h
be bu
involv
decis

Do you think about your water and wastewater projects the same way? Why or Why not?

how many
bedrooms, where
the kitchen is, what
it looks like, etc?

Why is it necessary to work collaboratively with the home builder?

Remember that you know your specific system better than the engineer does



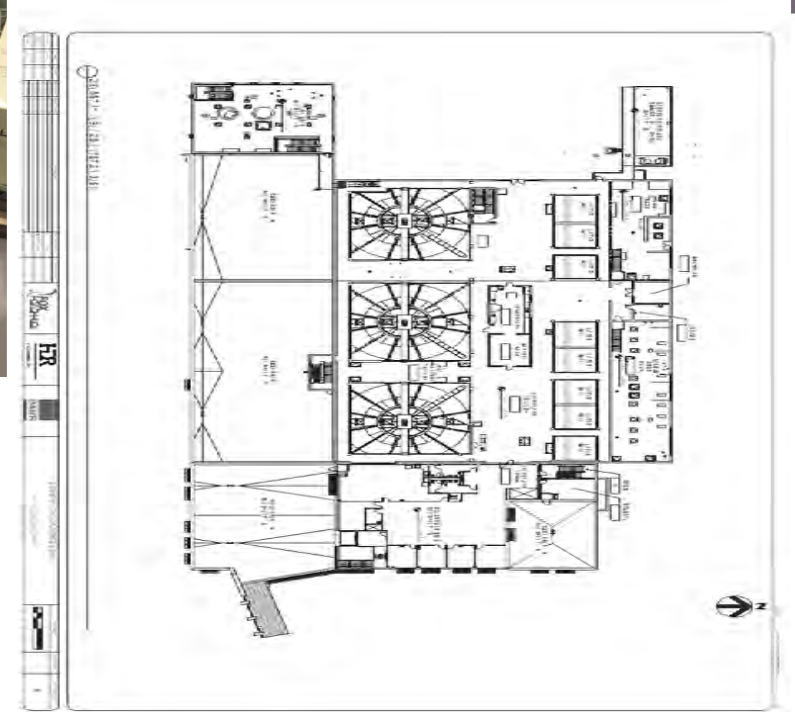
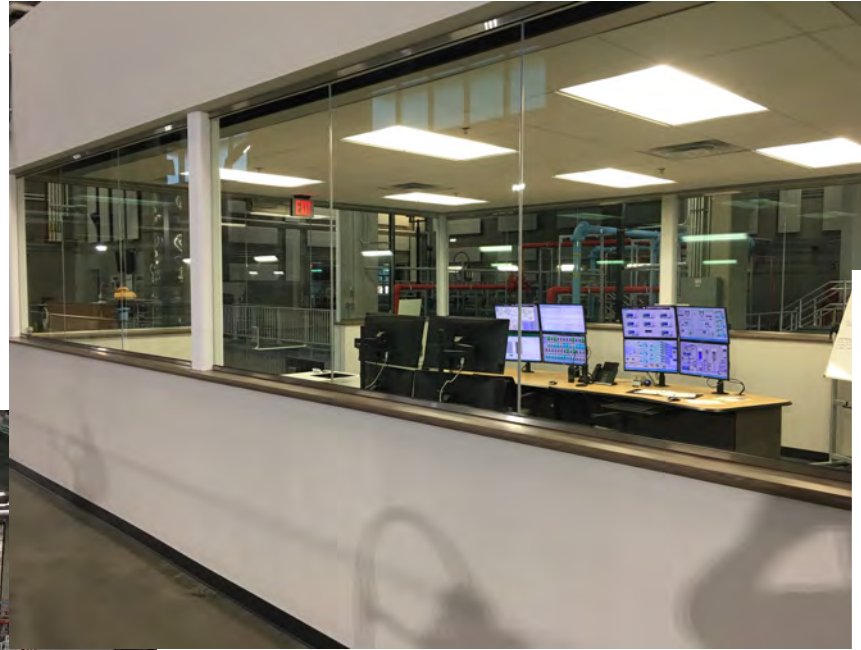
The engineer knows what goes into the design of the system better than you



Blending together is the best for both



Example: Involving Operations Personnel & Management Personnel in Pre-Design and Design



Benefits: Insufficient Data to Monetize

Compared to other projects

- Change orders were minimized

- Staff training was easier and minimized

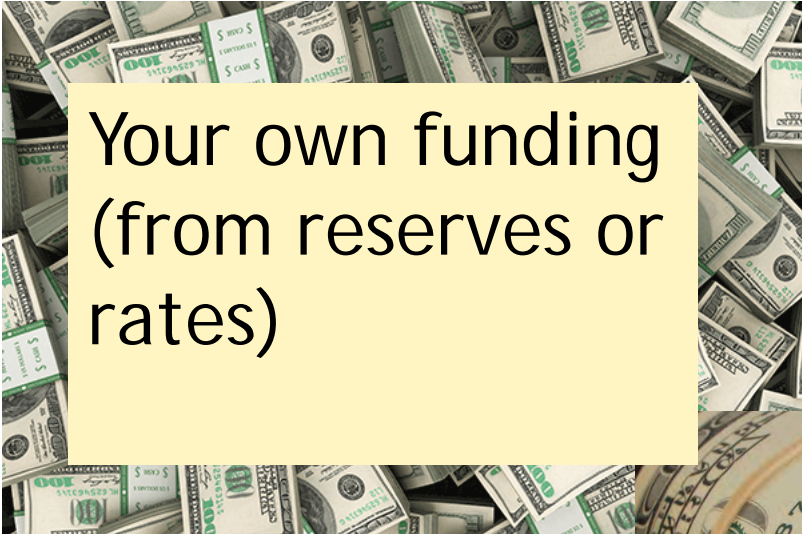
- Fewer maintenance issues

“Others are handed a system and told to make it work. We were involved the whole time and it was our system.” (Paraphrased Quote)




PART 6: APPLYING FOR FUNDING


Funding Options



Your own funding
(from reserves or
rates)

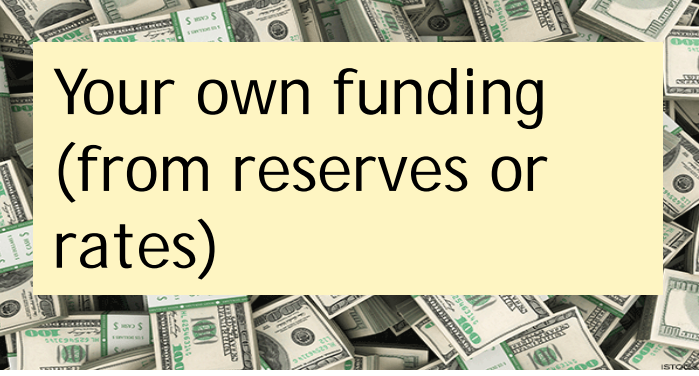


Federal or state
loans or grants

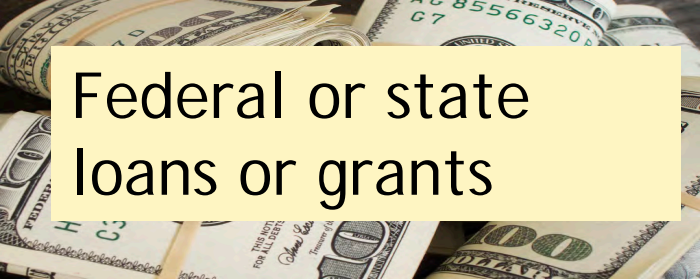


Other outside
sources (bonds,
private banks)

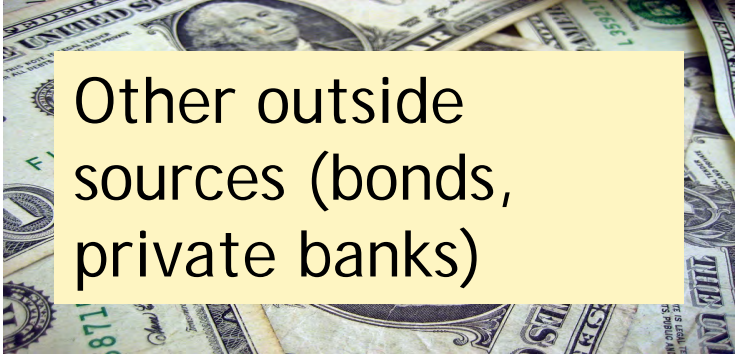
Considerations in the choices



Your own funding
(from reserves or
rates)



Federal or state
loans or grants



Other outside
sources (bonds,
private banks)

Total amount of money you need

Length of time the assets will last (will today's customers be paying for tomorrow's or vice versa)

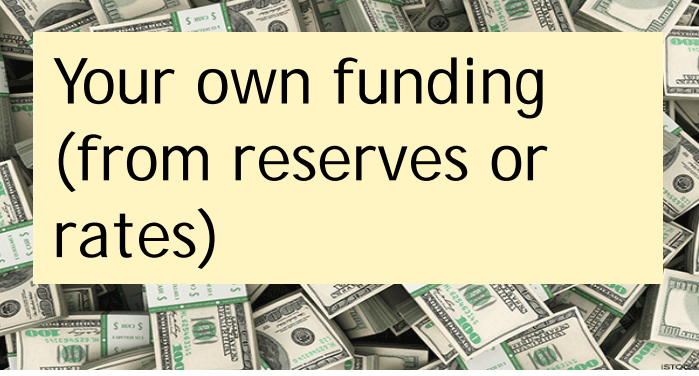
Amount of money you have in your funds (do you have reserve accounts)

Whether there are expected changes in the community in the future (either fewer or more customers)

Your ability to apply for other funds

Overall cost of the money

Your Own Sources



Your own funding
(from reserves or
rates)

If you have reserve accounts, were any of them set up for replacing assets?

Can you use some of the reserve money while still leaving enough for emergencies?

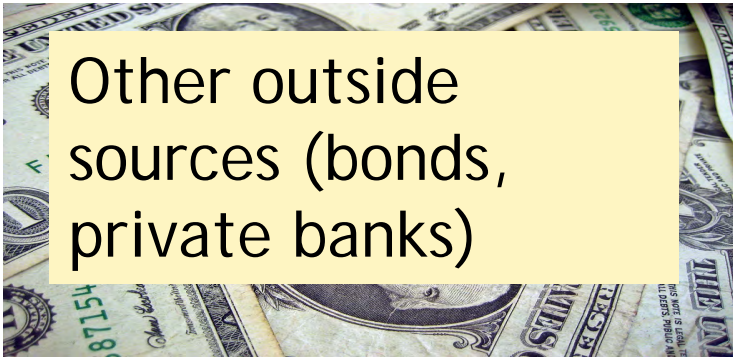
What are your current rates? Can the rates be raised so that some of the money can be used for asset replacement?

Other Outside Sources

Is your system eligible for other outside sources, such as bonds?

If so, is your bond rating favorable enough to access this type of funding?

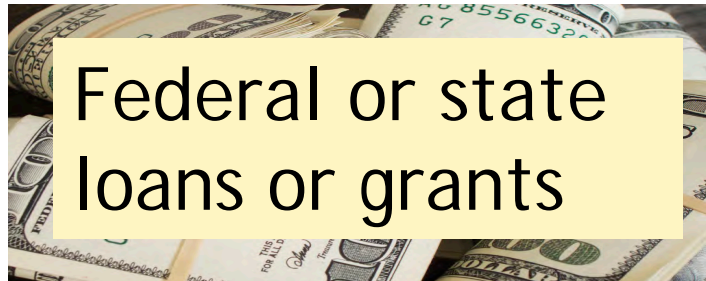
If you're not eligible for state funding, the only option may be private funding sources, such as banks.



Other outside sources (bonds, private banks)

Federal or State Loans and Grants

There are numerous sources of funding in Nevada from various agencies



Federal or state
loans or grants

One source of Funding: SRF

State Revolving Loan Fund

THE DRINKING WATER STATE REVOLVING FUND

Protecting America's Public Health for Over 20 Years



Clean Water
State Revolving Fund



Office of Financial
Assistance for
Drinking Water
and
Clean Water
Project

Do you own or operate a public or private water system that needs funding to meet EPA standards, rehabilitate an aging system, or improve an existing system for efficiency and environmental changes?



Resources
are
available
to help

Some considerations in managing your loan or grant funds

Milestones

Outputs &
Outcomes

Construction projects for water and wastewater utilities can last a long time, many months to several years

LONG TIME



What's the likelihood everything would have run smoothly for that whole time period? Would we be able to make adjustments along the way? How well could we communicate to important stakeholders about the project?



What if a project lasted 2 years and we only checked in on the project at the beginning and end?



Milestones

We need check-in points along the way

These are called milestones



What are milestones?

Major and minor (if significant enough) accomplishments along the way to completing the project



Milestones

What are milestones?

These are NOT tasks. They have a duration of zero time. They mark an accomplishment or occurrence.



What are milestones?

They show forward movement and progress in the project, even to someone who doesn't know what the steps to achieve the accomplishment were.



The milestones tell the story of the project from start to finish.



How many?

We need enough to monitor progress and allow for mid-course correction, but not so many that it is hard to manage or that they have no meaning.

How to tell if something is a milestone?

Is the event **highly important** to the execution of the overall project?

If the event, decision, or action is not met on time will there be a **serious impact** on the overall project completion?

Can the event, decision, or action be used as an **indicator of success**?

So, A Milestone.....

Is **highly important**

Has a **serious impact**

Is an **indicator of success**

Outputs



VS

OUTCOMES



Outputs

What is created
The numeric results
Does not involve a
consideration of quality;
considers quantity

Outputs

Examples:

The number of people served by a water system

The number of gallons of water produced

The number of miles of pipe put in the ground

The level of performance, achievement, or quality that occurred because of the activity

A quantification of the performance and an assessment of the success of the process



Examples:

The increase in the % of people served by water meeting EPA's primary drinking water standards

Reduction of a particular contaminant in the drinking water (e.g., reduced arsenic concentration)





Outputs

Which ones are
better measures
of the
effectiveness of
the project?

Why?



OUTCOMES

Building Projects to Achieve Outcomes:



1. Describe the outcomes you are trying to achieve with the project (why are you doing the project at all?)
2. Turn the outcomes you want to achieve (item 1) into something that can be measured (e.g., % increase in customers served by compliant drinking water or % increase in number of customers served by a community water system)

Building Projects to Achieve Outcomes:



3. Confirm that the outcomes are linked to the outputs and activities (can you expect to achieve the outcomes based on what you are doing?)
4. Implement the measurement of outcomes and track achievement over time
5. Demonstrate your success to regulatory agencies, elected leaders and customers based on your data



As the project is being completed, consider whether the anticipated outputs and outcomes are being achieved along the way



Part 7: Build Internal Capacity

DO YOU NEED TO BUILD INTERNAL CAPACITY
TO QUALIFY FUNDING, ACCOMPLISH THE
PROJECT, OR ACHIEVE SUSTAINABILITY ?

1996: Enter Capacity Development



Capacity development is a continuous
improvement process

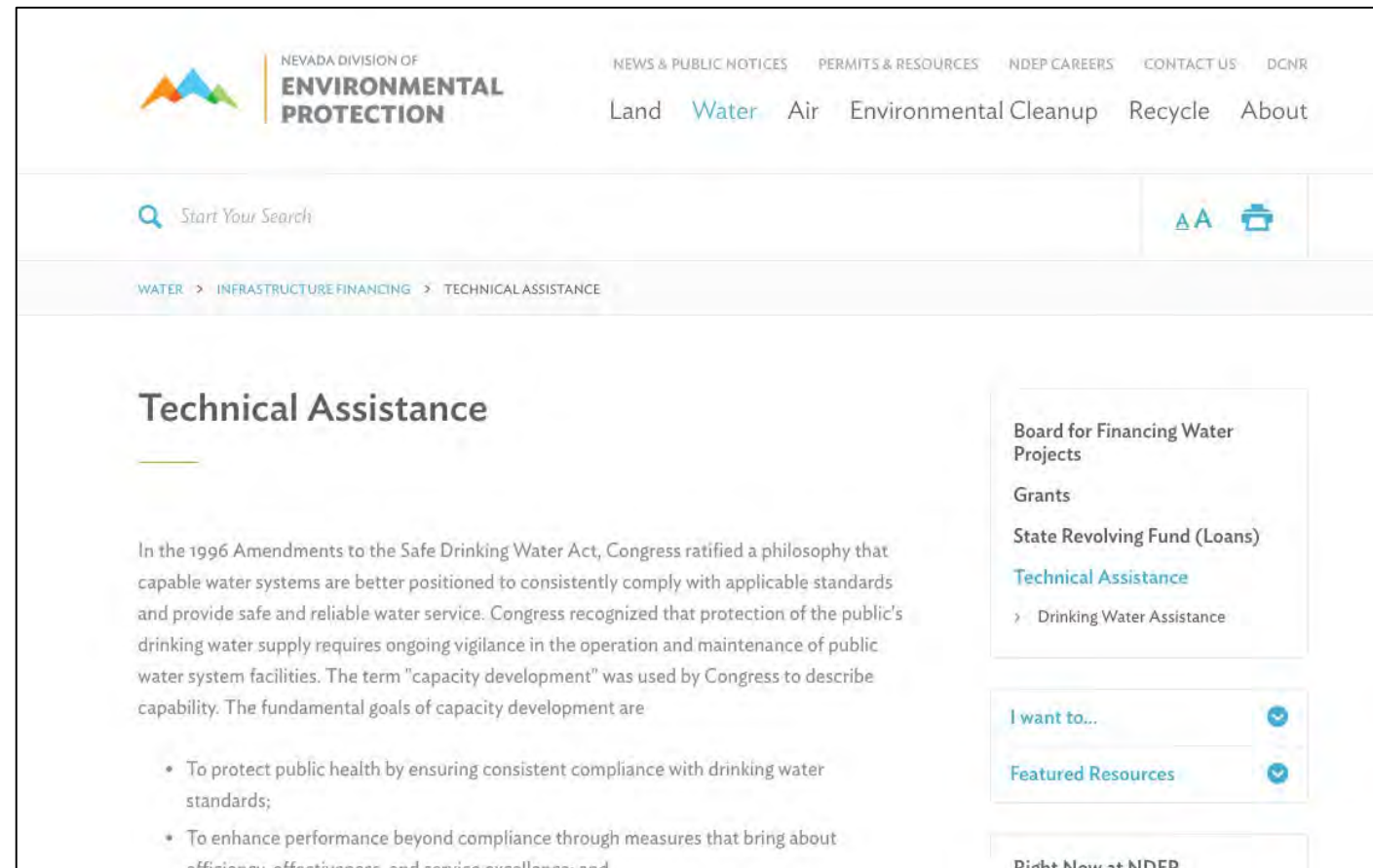
Everyone can improve!!!

Nevada Capacity Assessment Form

Can access on-line.

Lots of good information/
resources there

<https://ndep.nv.gov/water/financing-infrastructure/capacity-development>



The screenshot displays the website for the Nevada Division of Environmental Protection (NDEP). The header includes the NDEP logo and navigation links for News & Public Notices, Permits & Resources, NDEP Careers, Contact Us, and DCNR. Below the header is a search bar with the text "Start Your Search" and icons for accessibility (A) and print. The main content area features a breadcrumb trail: WATER > INFRASTRUCTURE FINANCING > TECHNICAL ASSISTANCE. The title "Technical Assistance" is prominently displayed. The text below explains the 1996 Amendments to the Safe Drinking Water Act and the concept of capacity development. A list of goals is provided, including ensuring compliance with drinking water standards and enhancing performance through efficiency and service excellence. On the right side, there is a sidebar with links to "Board for Financing Water Projects", "Grants", "State Revolving Fund (Loans)", and "Technical Assistance". The "Technical Assistance" link is highlighted, and a sub-link for "Drinking Water Assistance" is visible. At the bottom right, there are sections for "I want to..." and "Featured Resources", both with dropdown arrows, and a "Right Now at NDEP" section.

NV Self-Assessment for Capacity Development



State of Nevada
Nevada Division of Environmental Protection
Office of Financial Assistance

901 So. Stewart Street, Suite 4001, Carson City NV 89701-5249

Technical, Managerial and Financial (TMF) Capacity Survey for Public Water Systems (PWS)

Public Water System Name: _____ State PWS ID#: _____
____ Community ____ Non-Transient, Non-Community ____ Transient, Non-Community

Address: _____

PWS Type:
____ Public Municipal ____ Private Municipal ____ General Improvement District
____ Mobile Home Park ____ Homeowner's Association ____ Private, Non-profit
____ Other, Please Specify _____

Contact Name, Title: _____ Contact Phone: _____
Contact Email: _____ Contact FAX: _____

Interview Date: _____ Person Performing Evaluation: _____

For ease of calculation, please use the accompanying TMF Capacity Survey Calculator spreadsheet.

TECHNICAL SCORE:
MANAGERIAL SCORE:
FINANCIAL SCORE:
TOTAL CAPACITY EVALUATION SCORE:

Water system satisfies NRS 445A.817, 827 and 847 Statutory Definitions for "Technical, Managerial and Financial Capability." Please note that capacity and capability are used interchangeably in this document. Assumes a score of 65% or higher in each capacity category.
____ Yes ____ No

Note that water systems that lack adequate TMF Capacity or that cannot reasonably achieve adequate TMF Capacity may be ineligible for financial assistance from the Drinking Water State Revolving Fund (NAC 445A.67563).

____ PWS Uninterested/Uncooperative ____ Contact Not Possible

Good way to determine your starting place and areas for improvement

May be possible to roll some of the activities into the overall project

Others you can get help to improve

For each indicator, please rate yourself on a scale of 1-3, based on your system's current capacity. If your water system is interested in technical assistance for a particular question/indicator, please check the item labeled "Interested in TA" and provide any comments.

Technical Capacity

NRS 445A.847 "Technical capability" defined. "Technical capability" means the ability of a public water system to:

1. Obtain an adequate and reliable source of water that is necessary to provide the quantity and quality of water required by the system;
2. Establish and maintain an adequate infrastructure for the treatment, storage and distribution of the quantity and quality of water required by the system; and
3. Employ operators who have the technical knowledge and ability to operate the system

1. Does the water system have a digital utility map/service area map of the entire service area that includes the location of each water source, treatment facility, pumping station, reservoir, pressure zone and control and isolation valve? Are service area boundaries outlined? Does the map include future growth areas? Are precise "As-Built" plans or drawings prepared and maintained for all new facilities? The water system should have copies of the actual CAD drawings as well as paper copies.

_____ Interested in TA _____ N/A

Comments:

	Assessment			Score (1-3)
Mapping	Strong Technical Capacity 3	Moderate Technical Capacity 2	Weak or deficient Technical Capacity 1	
As-Built Plans	As-Built plans have been reviewed and are 100% accurate.	As-Built plans have been reviewed but are <100% accurate.	As-Built plans have not been reviewed, or are not accurate, or are not maintained for any facilities.	
Computer Aided Design (CAD) Maps	PWS has up to date CAD maps both in digital and paper format.	PWS has CAD maps in both digital and paper format, but they have not been updated to reflect recent water system changes (e.g. adding valves etc.)	PWS only has maps in paper format.	
Water System Assets	All current water system assets are identified in maps including: sources, storage tanks, valves, booster pumps, water lines, hydrants, etc.	Because maps are not updated annually, some water system assets &/or minor changes have not yet been included.	Because maps are not updated annually, many water system assets/changes have not yet been included.	

Can get help from TA Providers:

EFCN
RWA
RCAP

For each indicator, please rate yourself on a scale of 1-3, based on your system's current capacity. If your water system is interested in technical assistance for a particular question/indicator, please check the item labeled "Interested in TA" and provide any comments.

Technical Capacity

NRS 445A.847 "Technical capability" defined. "Technical capability" means the ability of a public water system to:

1. Obtain an adequate and reliable source of water that is necessary to provide the quantity and quality of water required by the system;
2. Establish and maintain an adequate infrastructure for the treatment, storage and distribution of the quantity and quality of water required by the system; and
3. Employ operators who have the technical knowledge and ability to operate the system

1. Does the water system have a digital utility map/service area map of the entire service area that includes the location of each water source, treatment facility, pumping station, reservoir, pressure zone and control and isolation valve? Are service area boundaries outlined? Does the map include future growth areas? Are precise "As-Built" plans or drawings prepared and maintained for all new facilities? The water system should have copies of the actual CAD drawings as well as paper copies.

_____ Interested in TA _____ N/A

Comments:

	Assessment			Score [1-3]
Mapping	Strong Technical Capacity 3	Moderate Technical Capacity 2	Weak or deficient Technical Capacity 1	
As-Built Plans	As-Built plans have been reviewed and are 100% accurate.	As-Built plans have been reviewed but are <100% accurate.	As-Built plans have not been reviewed, or are not accurate, or are not maintained for any facilities.	
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Free resources are out there as well



Resource Library

[View All Tools](#) | [View All Publications](#) | [View All Posts](#)

For an overview of some of the tools and resources available in our Resource Library, please view our [Tools and Resources flyer](#).

What does your system need help with?

- + We treat more water than we sell.
- + We have insufficient revenue to cover our costs.
- + We have aging infrastructure and we want to get the longest useful life.
- + How can we use less energy but maintain our level of service?
- + Where can we find outside funding to support our water system?
- + How can we work with other water systems to lower costs?
- + Can customers afford to pay for water service?

<https://efcnetwork.org/>

Build Capacity With Asset Management



What is the #1 reason your water, wastewater, or stormwater system exists?

To serve your customers

What is the best reason to take on Asset Management?

To *Better* serve your customers



By its very definition, Asset Management is meeting the desired level of service at the lowest life cycle cost.

<https://www.piqsels.com/en/public-domain-photo-jfodp>

By its very definition, Asset Management is meeting the *desired level of service* at the lowest life cycle cost.

To serve your customers

By its very definition, Asset Management is meeting the *desired level of service* at the

lowest life cycle cost.

To ***Better*** serve your customers

Reliability	Safety	Convenience	Customer Service	Environmental Protection
Quality	Resilience	Responsiveness	Regulatory Compliance	Communication
No service disruptions	no inconvenience (no blocked streets, etc.)	Understandable bills	Easy payment systems	Sustainability

What kind of things do customers want?

Low Cost!!

Reliability	Safety	Convenience	Customer Service	Environmental Protection
Quality	Resilience	Responsiveness	Regulatory Compliance	Communication
No service disruptions	no inconvenience (no blocked streets, etc.)	Understandable bills	Easy payment systems	Sustainability

One other big thing they want

Resources (Time & Money)

Reliability	Safety	Convenience	Customer Service	Environmental Protection
Quality	Resilience	Responsiveness	Regulatory Compliance	Communication
No service disruptions	no inconvenience (no blocked streets, etc.)	Understandable bills	Easy payment systems	Sustainability

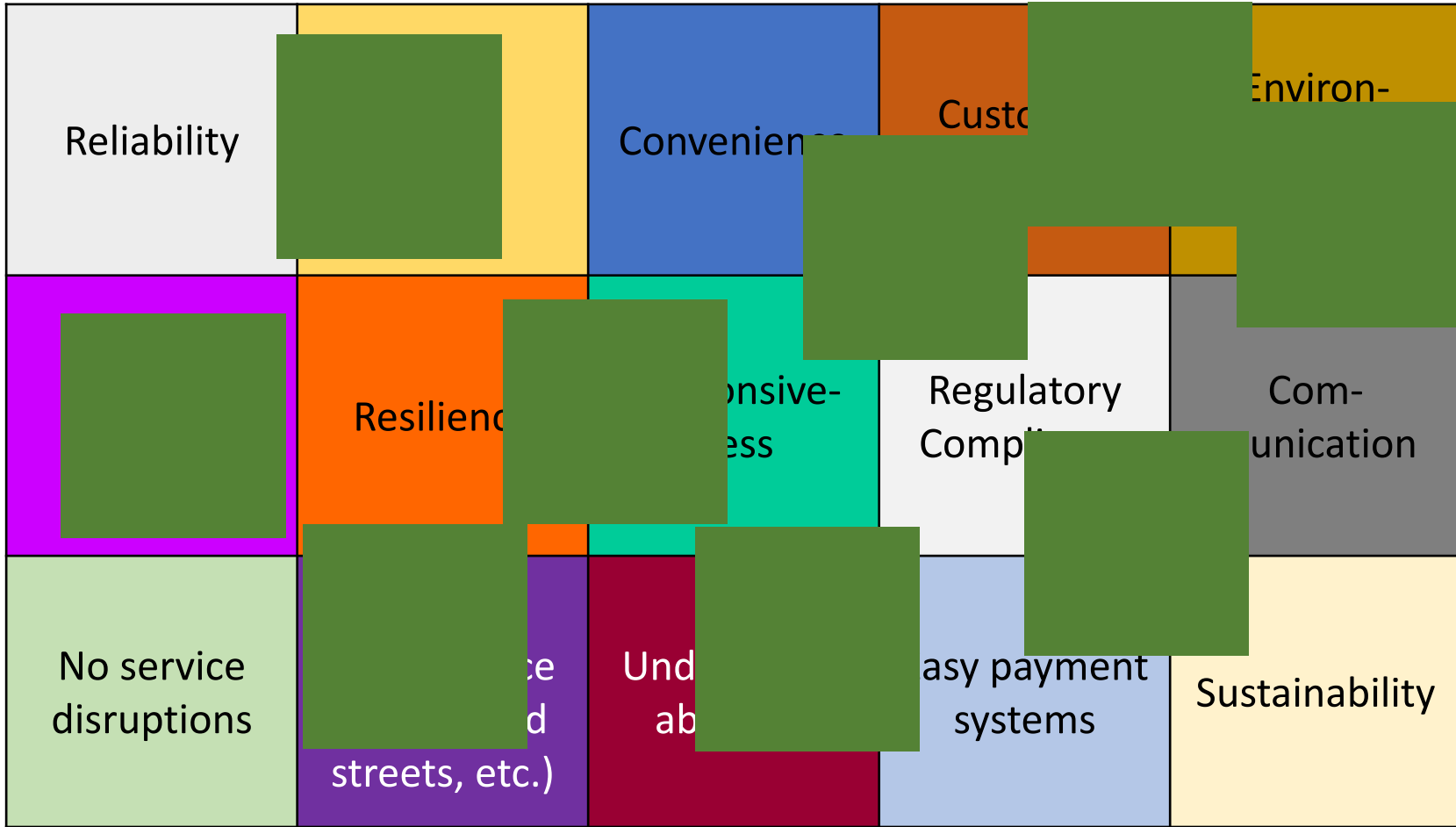
The amount customers pay (or is otherwise provided by Tribal government) provide the utility its resources

Time & Money

Reliability	Safety	Convenience	Customer Service	Environmental Protection
Quality	Resilience	Responsiveness	Regulatory Compliance	Communication
No service disruptions	no inconvenience (no blocked streets, etc.)	Understandable bills	Easy payment systems	Sustainability

Financial resources don't always cover all the items. So, what happens?

Time
and
Money



Resources are spread around

What's the impact of these choices?

Are the highest priority customer service requirements being met?

How would you know and what would you do if they're not met?



Asset Management provides the framework to make these decisions in the best way for your customers

Picture credit: [Markus Grossalber](#)

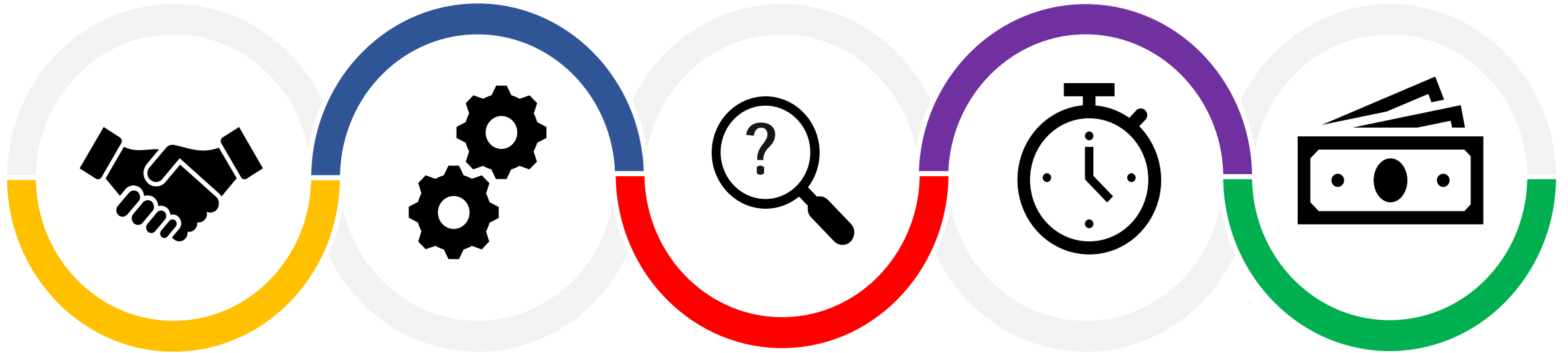
<https://www.flickr.com/photos/58883622@N02/8417927326>

Five Major Components

What service level do you want to provide?

Which ones are most critical to provide that service?

Do you have the money to get it all done?



What assets do you have?

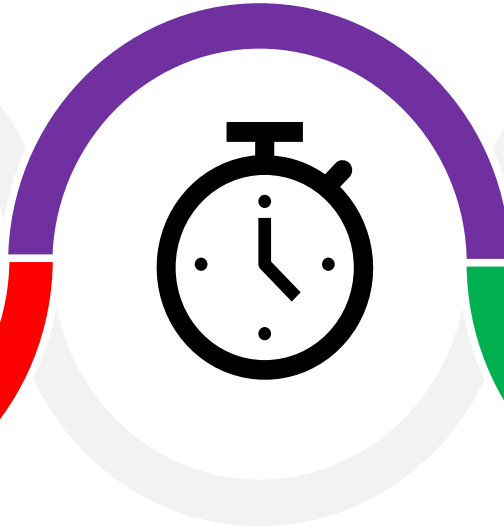
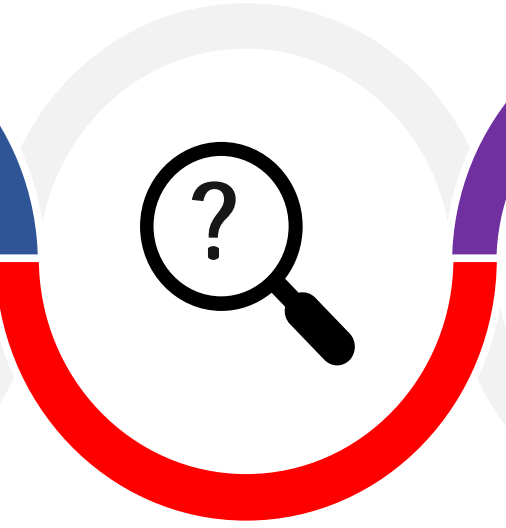
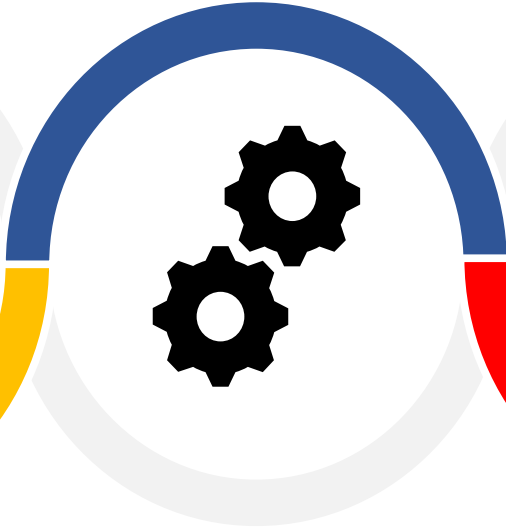
How do you ensure the assets do their job over their life spans?

Five Major Components

What service
Level of Service
want to provide?

Which ones are most
critical to provide
that service?

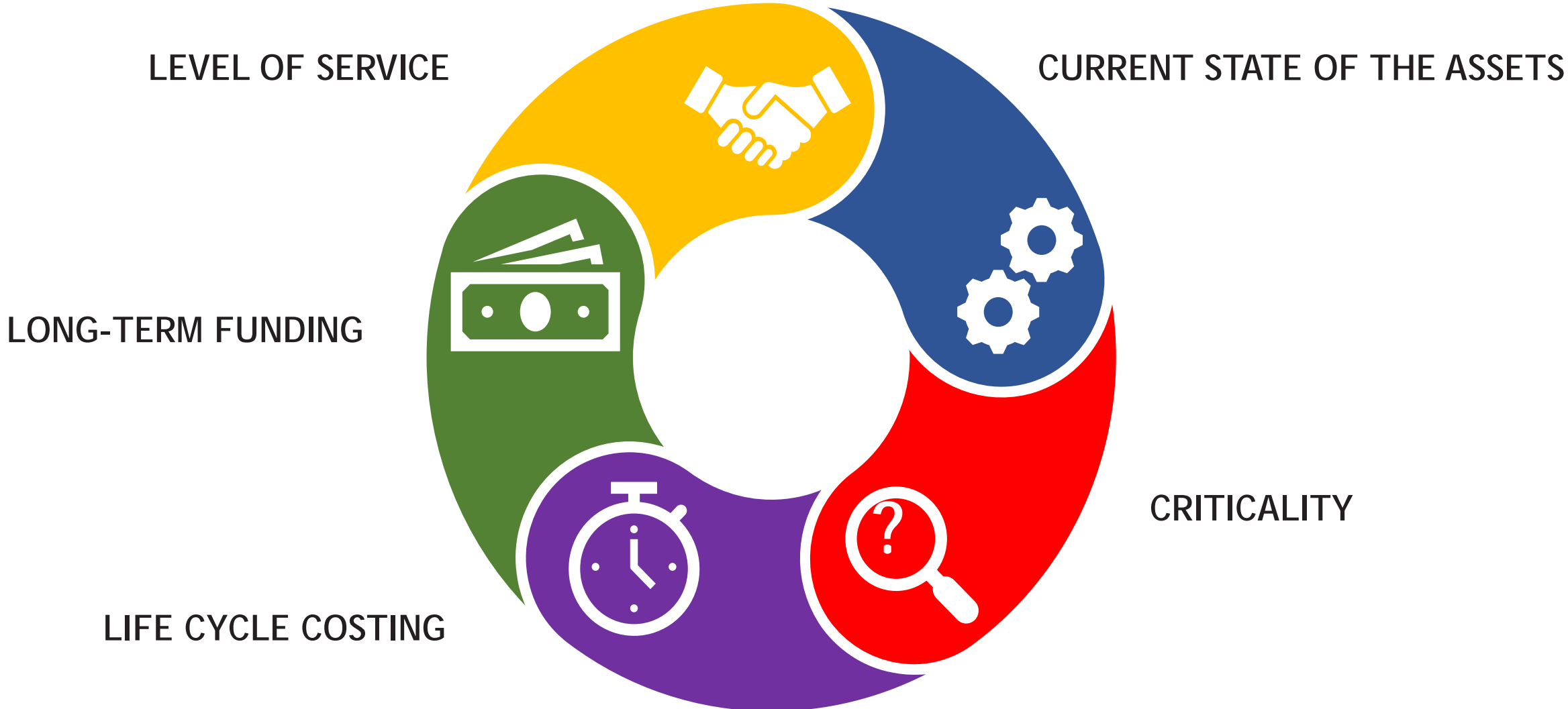
Do you have
the money to
get it all done?



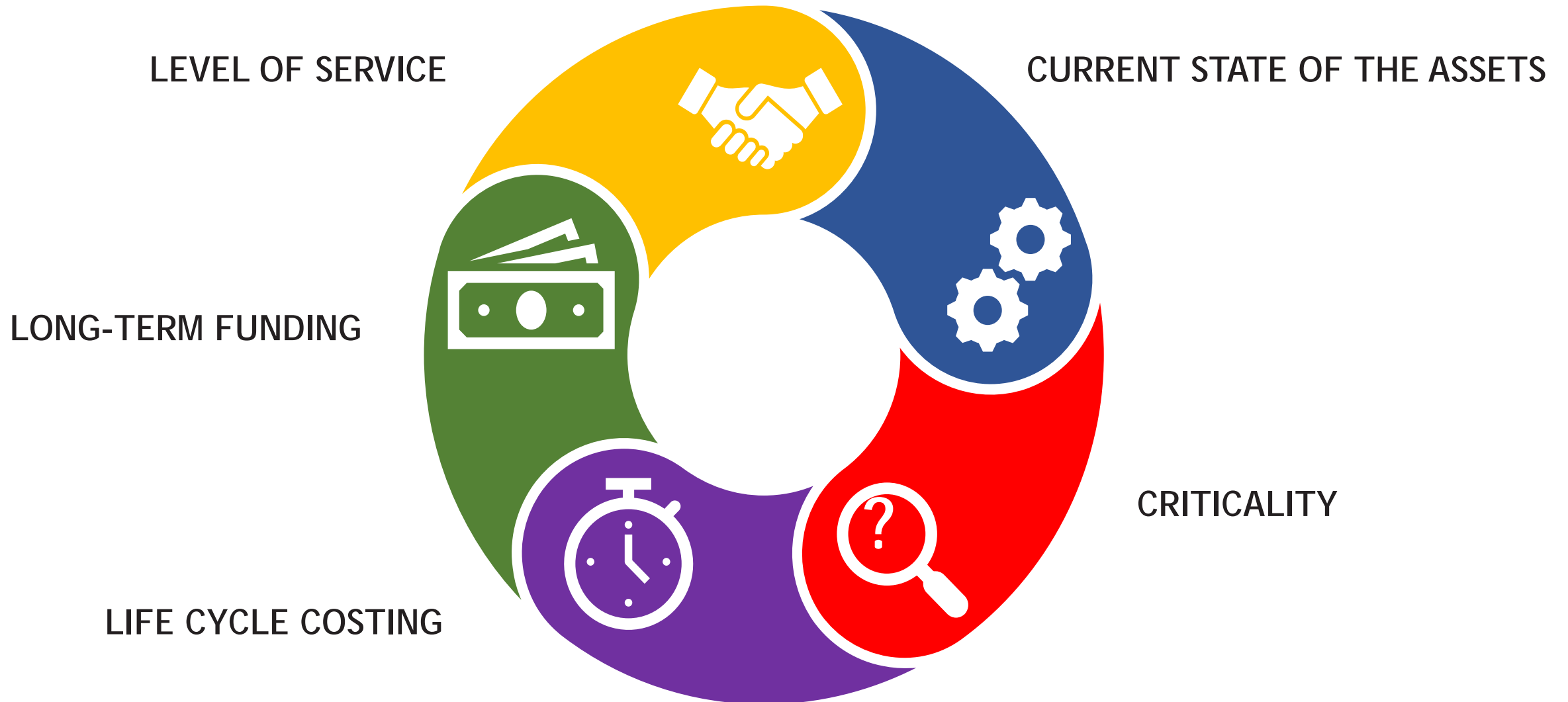
What state
of the Assets?

How do you ensure the
assets do their job over
their life spans?

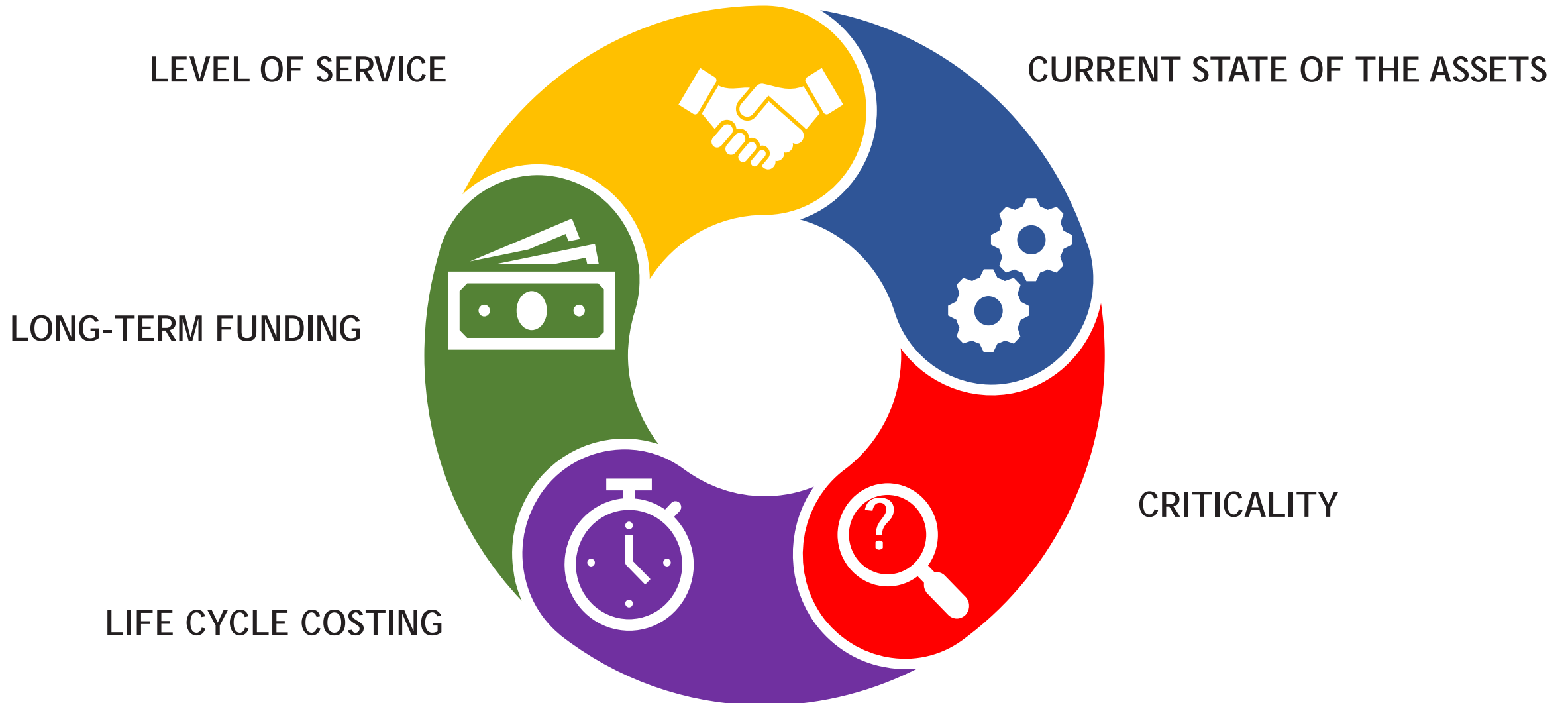
Asset Management Is Not Actually Linear



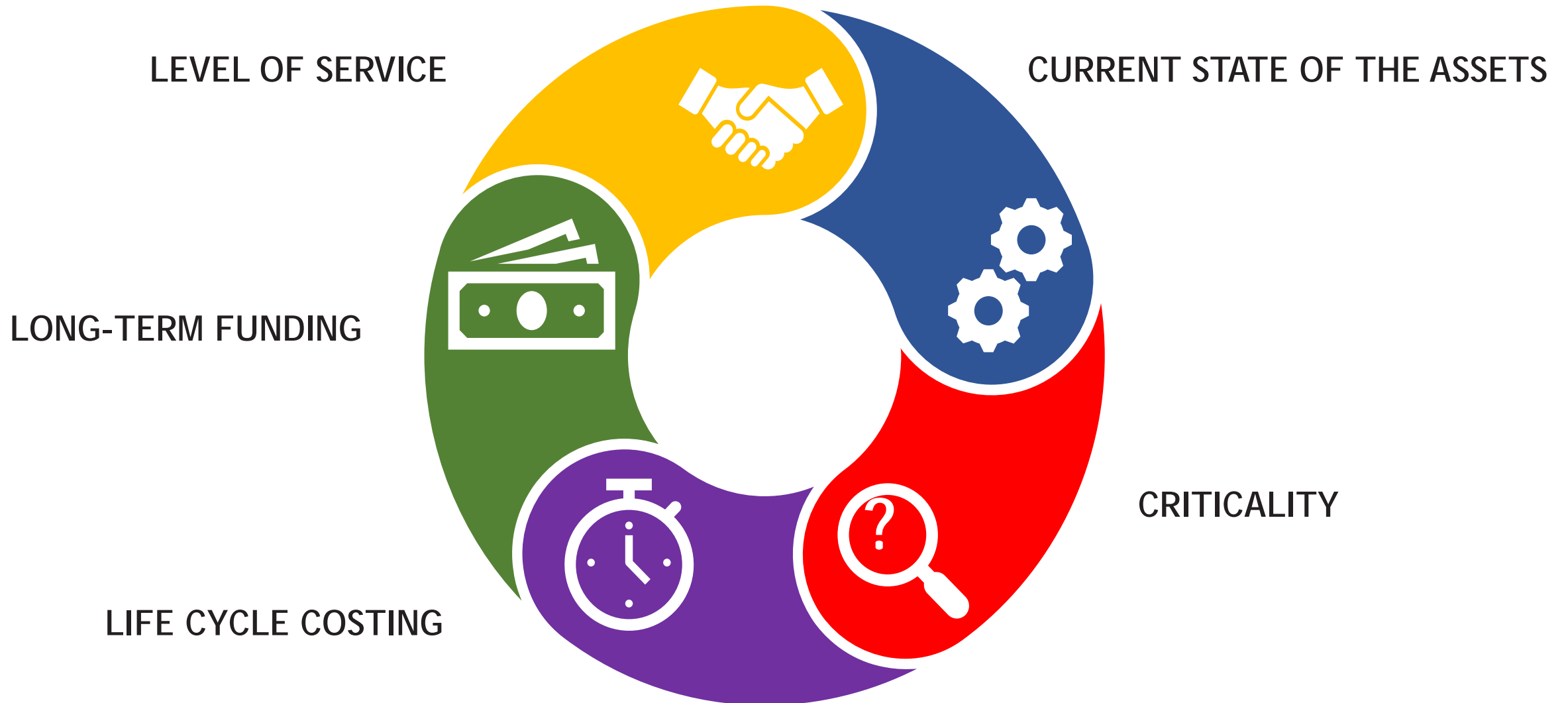
It has no beginning or end



It is a journey not a destination



It is a journey not a destination



AM Addresses much of capacity but
in a strategic framework

Can measure starting point

Can measure progress

Continuous improvement process

So Where to Start??????


One Option: Start with a Map



To collect location data and asset attribute information on assets in the community

Where Else Can You Start?????

knowledge



Establishing a
legacy



How do you create a legacy of information from a long-term operator?



Where Else Can You Start?????

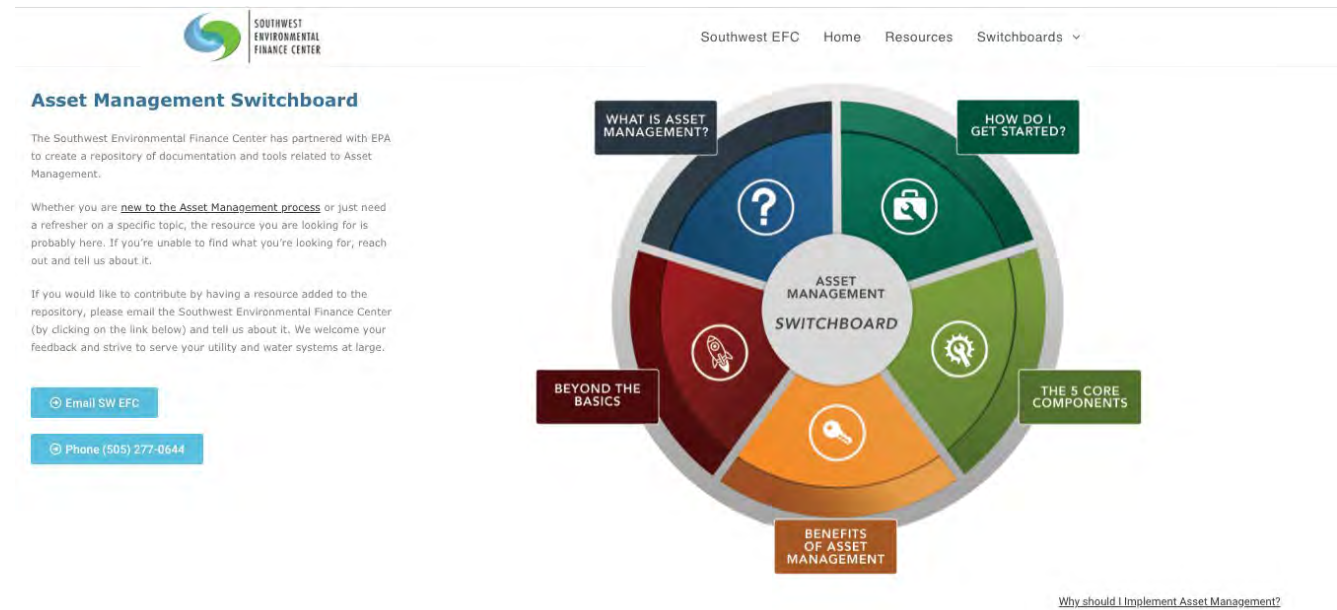
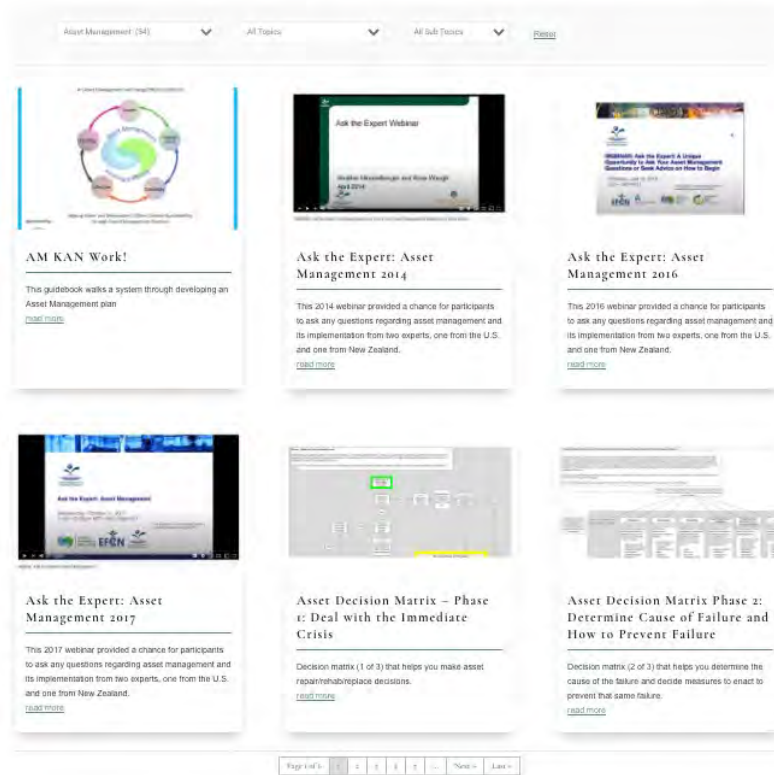
Using Data to Improve Decision-Making



Turning the information the utility has into data that can be used to make better decisions

When you're ready to begin
there are resources to help

Free resources are out there as well



<https://swefcamswitchboard.unm.edu/am/>

<https://swefc.unm.edu/home/resources/>

Asset Management vs. Fiscal Sustainability Plans



VS.

Office of Financial Assistance	EFFECTIVE DATE	PAGE
Guideline and Policy	February 25, 2019	Page 1 of 5
SUBJECT: Fiscal sustainability plan required for CWSRF & DWSRF loan recipients		

This guideline and policy is created to describe the Office of Financial Assistance (OFA) requirements for a fiscal sustainability plan (FSP).

Background:

On June 10, 2014, President Obama signed into law the Water Resources Reform and Development Act of 2014. Among its provisions are amendments to Titles I, II, V, and VI of the Federal Water Pollution Control Act (FWPCA). The act is codified in Title 33 of the United States Code. As amended, the FWPCA now includes section 603(d)(1)(E), which states:

(E) for a treatment works proposed for repair, replacement, or expansion, and eligible for assistance under subsection (c)(1), the recipient of a loan shall—
(i) develop and implement a fiscal sustainability plan that includes—
(I) an inventory of critical assets that are a part of the treatment works;
(II) an evaluation of the condition and performance of inventoried assets or asset groupings;
(III) a certification that the recipient has evaluated and will be implementing water and energy conservation efforts as part of the plan; and
(IV) a plan for maintaining, repairing, and, as necessary, replacing the treatment works and a plan for funding such activities; or
(ii) certify that the recipient has developed and implemented a plan that meets the requirements under clause (i);

Under this new law, a recipient that receives funding from the Clean Water State Revolving Fund (CWSRF) must develop and implement a FSP or certify that it has already developed and implemented such a plan. This only applies for projects that involve the repair, replacement, or expansion of a publicly-owned treatment works (33 U.S.C. §1383 (d)(1)(e)).

FSPs are not required for:

- New treatment works (unless they are physically replacing an existing treatment works or expanding the treatment capacity of an existing system)
- Projects involving an upgrade that does not involve repair/replacement or expand the treatment capacity (e.g., adding advanced treatment).

NV has merged these together so that the best of both are incorporated

Wrap Up



Identify the Need for the Project



Remember to Think About the Level of Service You Provide to Your Customers

What is the current level of service you are providing?

Do you know? If not, you should

Will the project you are contemplating help your level of service?

If the project doesn't improve LOS or enable you to maintain LOS, should you do it?

LOS
Level of Service



Use Data to Back Up the Need

Make sure to
perform a
thorough
Alternatives
Evaluation



Don't Forget the Importance of Planning

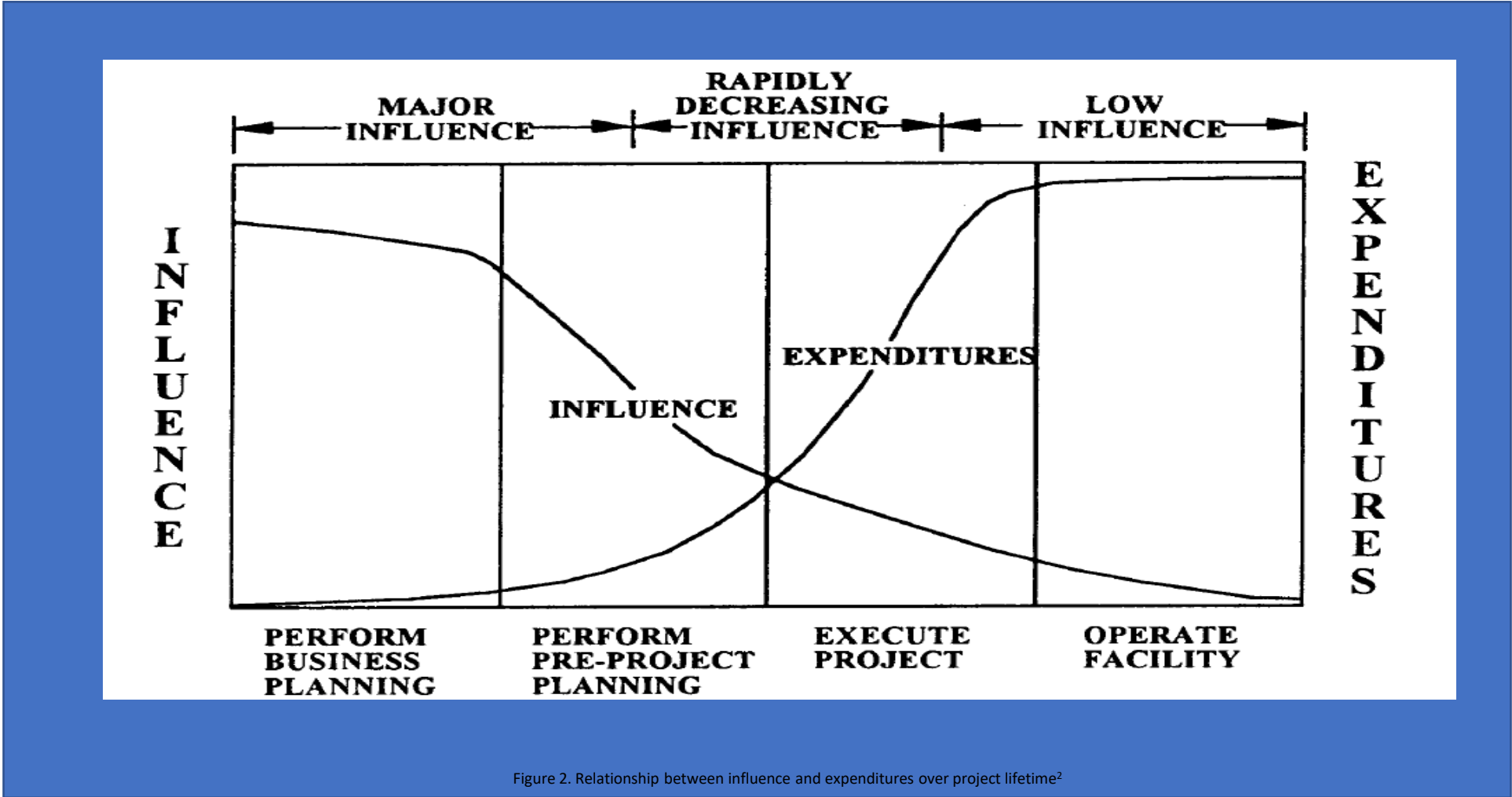
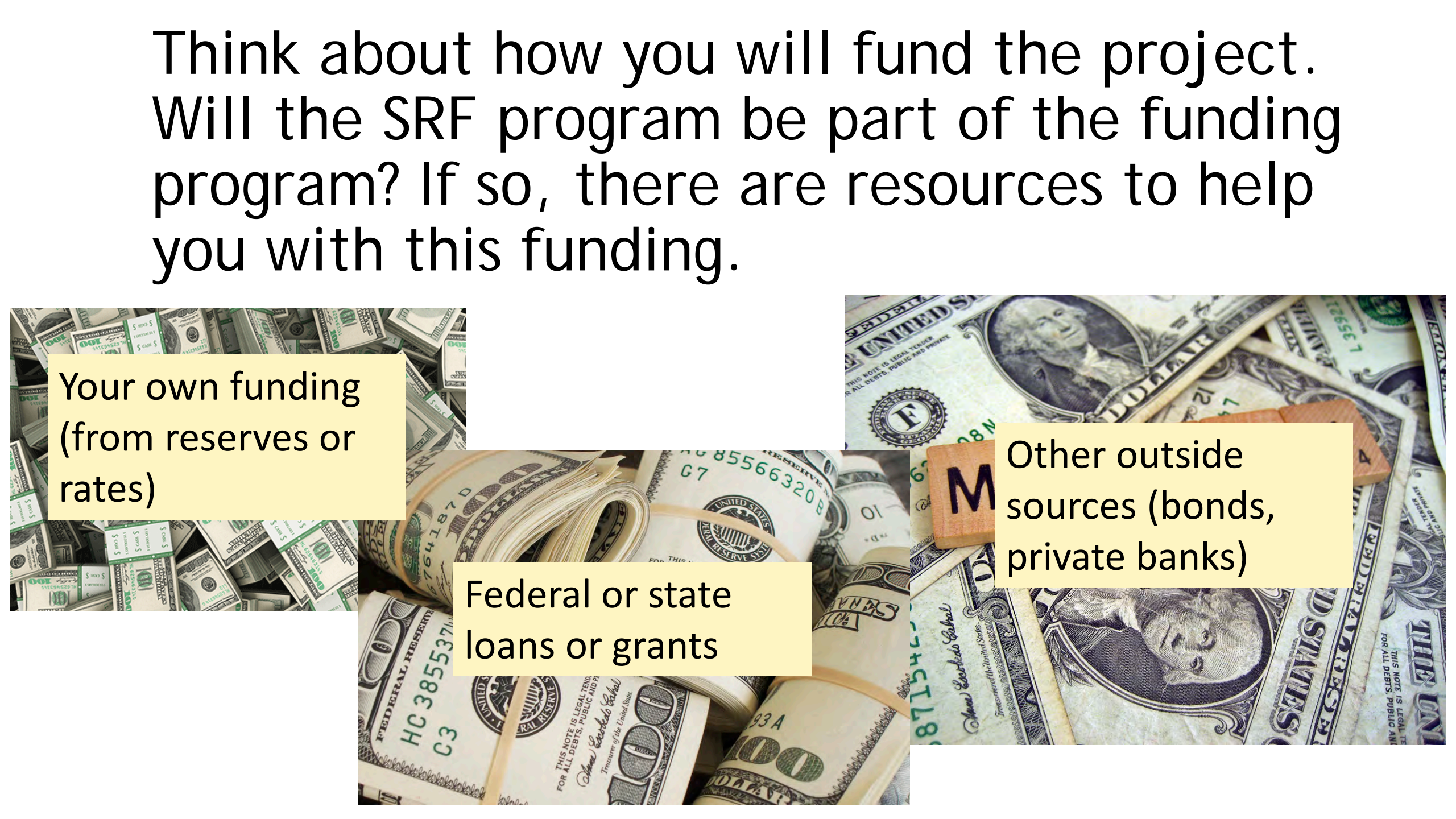


Figure 2. Relationship between influence and expenditures over project lifetime²



Engage professionals and work with them
collaboratively

Think about how you will fund the project. Will the SRF program be part of the funding program? If so, there are resources to help you with this funding.



Your own funding
(from reserves or
rates)

Federal or state
loans or grants

Other outside
sources (bonds,
private banks)

Build Internal Capacity



Help is Possible



efcnetwork.org or google "EFC Network"

Read and/or Subscribe to Our Blog Posts

Access Our Technical Assistance Financial
Check out Our Webinars and Other
Capacity Related Resources
Trainings, including Recorded Webinars



efcnetwork.org or google "EFC Network"

REQUEST ASSISTANCE

Technical Assistance Request Form

The EFON offers free help on financial and managerial topics to systems serving 10,000 or fewer people. Examples of assistance we can provide include:

- Creating an Asset management plan
- Near-term financial planning and rate setting
- Analyzing your revenues and expenses
- Offering ideas on how to effectively budget
- Long-term capital planning
- Assessing options for lowering energy use and/or water loss
- Identifying sources of outside funding
- Collaborating with other water systems
- Residency Planning

If you are interested in requesting assistance from our experts, please fill out the form below. You will be asked a few questions to help us understand your water system and what kind of assistance you need.

* Required

Name *

Title/Position

Phone Number *

Email *

Name of the drinking water system you represent *

City and State *

Public Water System ID (PWSID)
If you don't know your PWSID, please search for it here:
<http://www.epa.gov/owm/facts/adwa/search.html>

Fill out
Request Form
for Assistance

CONTACT INFORMATION



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