



City of Longview

1525 Broadway
Longview, WA 98632
www.ci.longview.wa.us

Agenda

Public Works SubCommittee

Wednesday, March 20, 2024

3:30 PM

Public Works Conference Room
1st Floor, City Hall

1. **HYBRID MEETING DETAILS**

24-00204 To join the webinar: <https://us02web.zoom.us/j/85191031903>
Webinar ID: 851 9103 1903
Or Telephone: (253) 215 8782 or (253) 205 0468

2. **CALL TO ORDER**

3. **ROLL CALL**

4. **APPROVAL OF MEETING NOTES**

24-00201 Notes from February 21, 2024

5. **OLD BUSINESS**

6. **NEW BUSINESS**

24-00202 BIDDING PROCESS

24-00203 COMPLETE STREETS PROJECTS

24-00281 SEWER ASSET MANAGEMENT PLAN - WALLA WALLA, if time allows

7. **PUBLIC COMMENT**

8. **ADJOURNMENT**



Minutes

Public Works SubCommittee

Wednesday, February 21,
2024

5:00 PM

Public Works Conference Room,
1st Floor, City Hall

1. **HYBRID MEETING DETAILS**

24-00144 To join the webinar: <https://us02web.zoom.us/j/85191031903>
Webinar ID: 851 9103 1903
Or Telephone: (253) 215 8782 or (253) 205 0468

2. **CALL TO ORDER**

The meeting was called to order at 3:35 pm.

Ken Hash opened the meeting with a brief overview.

In attendance: Councilmember Ruth Kendall, Councilmember Erik Halverson; Councilmember Keith Young

Staff: Ken Hash, Chris Collins, Sam Barham, Brian Steveson, Nancy Vandehey

3. **APPROVAL OF MEETING NOTES**

4. **OLD BUSINESS**

5. **NEW BUSINESS**

24-00145 **Utilities Operations Overview - Water, Sewer, & Filter**

Brian Steveson spoke on the Utility Operations Overview. Our average waterline breaks per year is around 25-40 a year. Most large meters were pulled out of the ground and put in hot boxes due to safety. There are 11 million gallons of water in our 10 reservoirs. Our 6 pump stations are showing their age. Brian explained the need for backflow devices. There was a discussion on lining sewer pipes and rebuilding manholes.

24-00146 **Utility Projects - WSF current & upcoming**

Sam Barham spoke on the current and upcoming projects.

24-00147 **Dedicated Fill Line**

Chris Collins spoke on the Dedicated Fill Line project and shared the estimates that we have to date. Due to time there was a limited discussion. This will be brought back to the next meeting.

24-00148 **Jackson, Mississippi Video discussion**

<https://www.youtube.com/watch?v=xOdF7A1ry7E>

Tabled due to time limitation.

24-00149 What's next?

- **Field Trips?**
- **Next Department?**
- **Projects to review?**

Bring back Fill Line and Jackson Mississippi Video discussion.

Other items to pursue:

Walla Walla Public Works Director to join us by zoom or get his APWA presentation to share

Patriot Rail truck tour

There was a short discussion on potholes and sidewalk reporting and repair schedule.

6. PUBLIC COMMENT**7. ADJOURNMENT**

The meeting is adjourned at 5:10 pm.



City of Longview

Agenda Summary

BIDDING PROCESS

Attachments:

1. Engineering Project Brief



Bidding Process Summary

Public Works Subcommittee

March 20, 2024

Samuel Barham, PE



Objectives

1. When required to Bid.
2. Exceptions to the Bidding law.
3. Types of Bids.
4. Bid process for Architectural and Engineering Services.
5. Bid process for Public Work's Construction.

When required to Bid.

- Is it Public Work or Ordinary Maintenance per RCW 39.04.010?
- Is the Public work's improvement more than \$150,000 two trades or \$75,000 one trade?
- Public work” means all work, construction, alteration, repair, or improvement other than ordinary maintenance, executed at the cost of the state or of any municipality, or which is by law a lien or charge on any property therein.

Bid Process for Architectural and Engineering Services.

- Minimal Competition – Under 50k
 - Select 1-3 qualifications on file with MRSC Roster (Roster is advertised every 6 months)
- Informal Competition 50k to 200K
 - Select 3-5 qualifications on file with MRSC or advertise for RFQ or RFP
- Formal Competition – Over \$200k
 - Formal individual RFQ or RFP
 - Public legal notice in major paper

Bid Process for Architectural and Engineering Services.

- During each process selected
 - Review and grade RFQ or RFP
 - May require interviews of top 3 firms
 - Negotiate contract with most qualified firm
 - Provide recommendation to Council for Award.

Bid Process for Public Work's Construction

- Engineering produces Proposal, Specifications, and Plans.
- Advertise in local paper min. 14 days, 21 min. when federal dollars, and more based on the complexity of the project.
- During bidding City might issue addendums to Proposal, Specifications, and Plans.
- Might require a pre bid conference.
- Bid Opening
- Must be awarded to the most responsible and responsive Contractor.
- After review of all the submitted proposal, Staff recommends to either award or reject bids.
- Council Awards Project.

QUESTIONS MORE INFORMATION:

City Bidding Book for Washington State (mrsc.
<https://mrsc.org/getmedia/5f218416-8d03-4ab2-b1af-eb86e42b3e87/City-Bidding-Book-Washington-State.pdf?ext=.pdforg>)



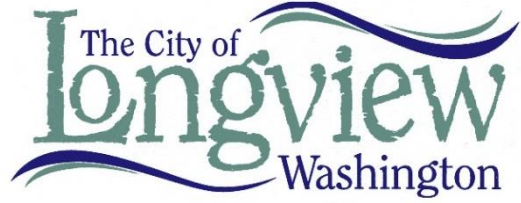
City of Longview

Agenda Summary

COMPLETE STREETS PROJECTS

Attachments:

1. Complete Streets Project Brief



Complete Streets Project Brief

Public Works Subcommittee

March 20, 2024

Morgan Palmer, PE



Objectives

1. Provide background on how we got here
2. Provide overview of current projects
3. Invite input on next steps

Timeline

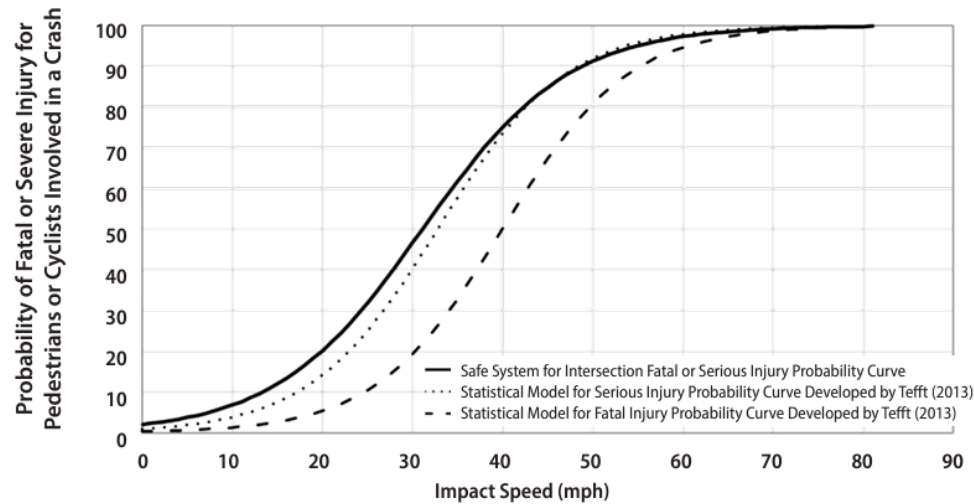
2019	2021	2022	2023 & Beyond
Complete Streets Policy	Speed Limits	Bicycle/ Pedestrian Master Plan	Project Implementation
Ordinance 3413	Ordinance 3449	Resolution 2412	

The Longview Complete Streets Challenge

- The city shall incorporate complete streets elements **into existing public streets** to create a comprehensive, integrated, connected transportation network that **balances access, mobility, and the health and safety needs of all users**. (12.70.050)
- The priority shall be on the **needs and comfort of all users**, considering issues such as street design and width, desired operating speed, street lighting, beautification and connectivity. (12.70.060)

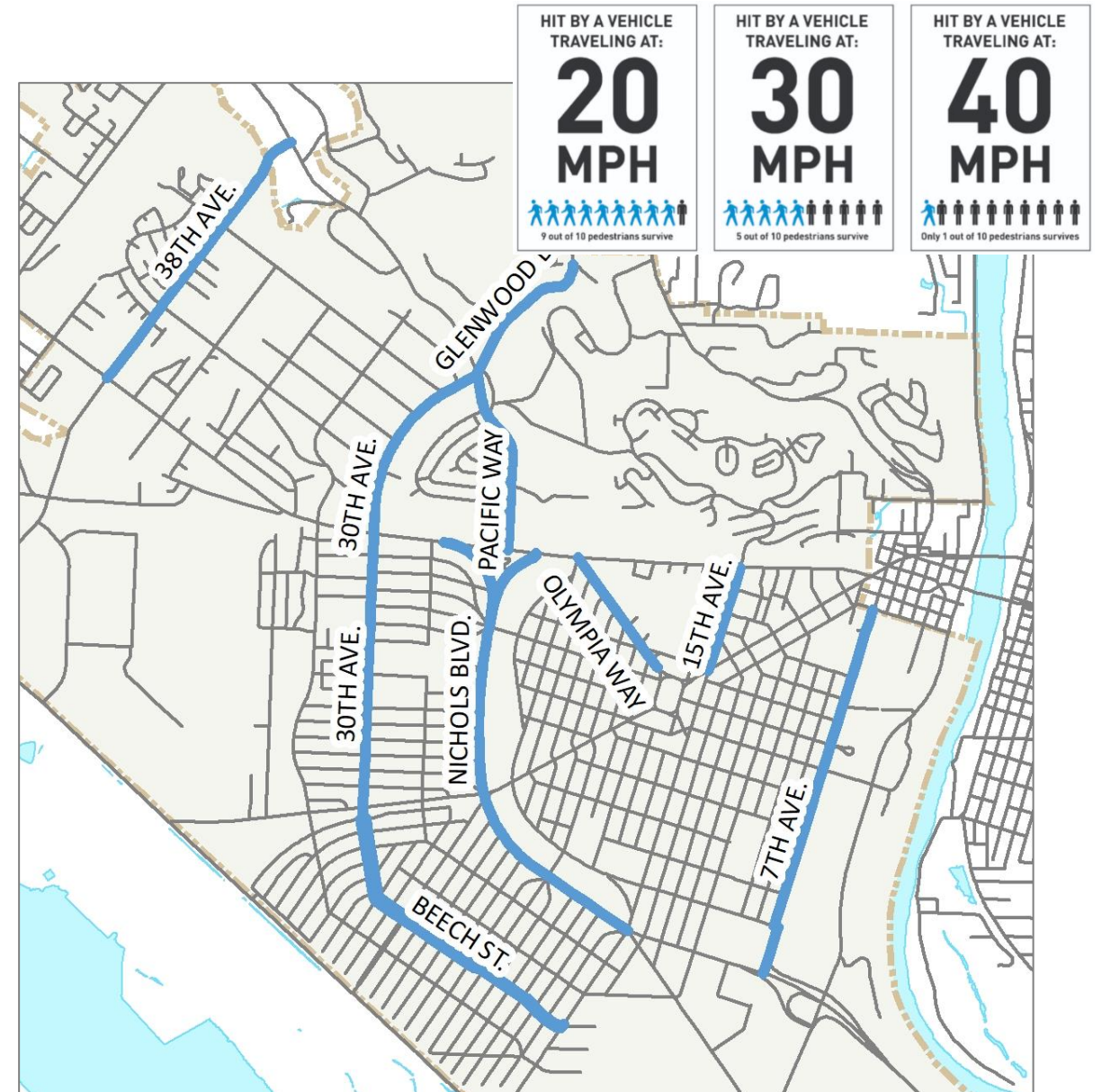
Speed Limits

- Streets near Parks and Schools



Source: Tefft, B. (2013). Impact Speed and a Pedestrian's Risk of Severe Injury or Death. *Accident Analysis & Prevention* 50: 871–878.

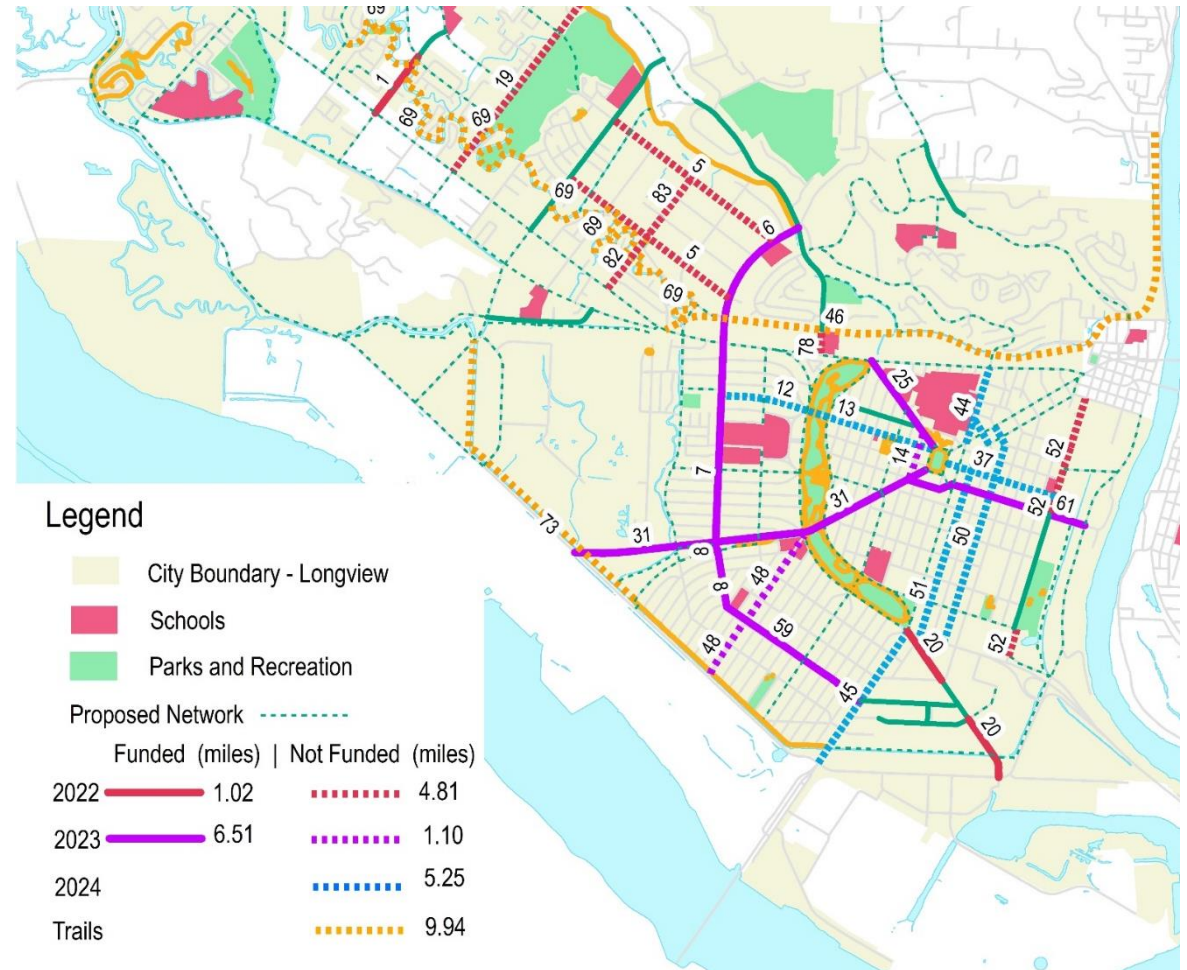
Figure 2. Comparison of pedestrian risk curves.

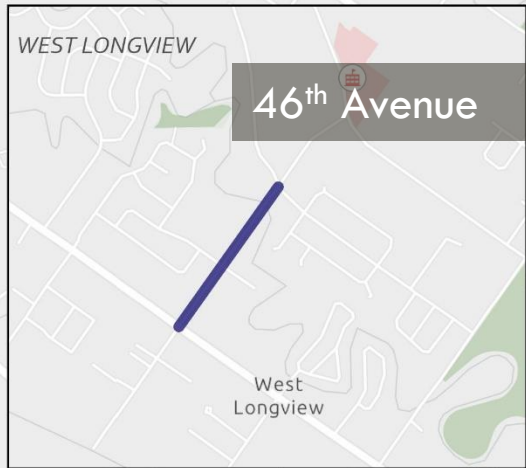


Bicycle and Pedestrian Master Plan

- 2021-2022
- Identifies deficiencies
- Provides design guidance
- Proposes project list

<https://www.mylongview.com/659/Longview-Bicycle-and-Pedestrian-Master-P>





30th Avenue

Nichols Blvd

Olympia Way

Downtown RRBs

Washington Way

Hudson Street

Beech Street

Legend

- Parks
- Schools
- Projects
 - Striping only
 - Pavement and Striping
 - Schools
 - Crossing Improvements

2024 Projects

Oregon State Parks, State of Oregon GEO, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS

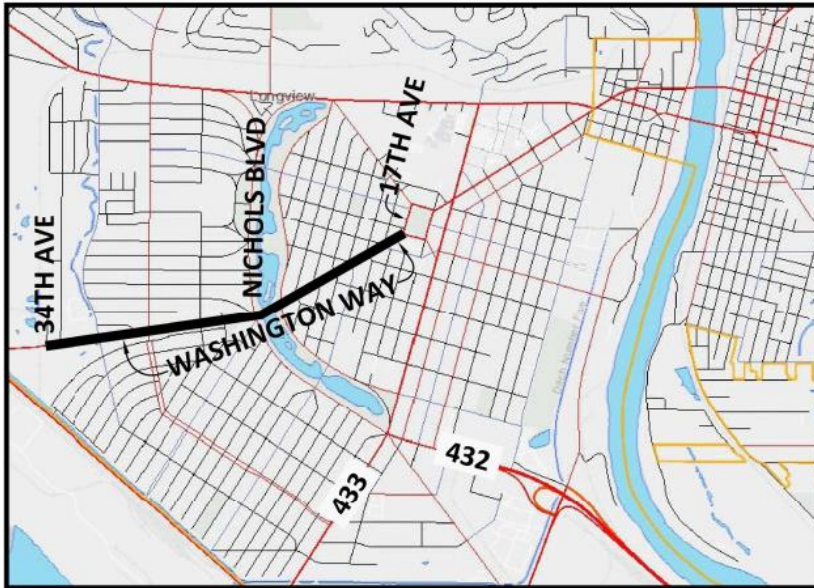
Optical Narrowing

When you add design elements and visual cues that make the street feel narrower to encourage slower, safer behaviors

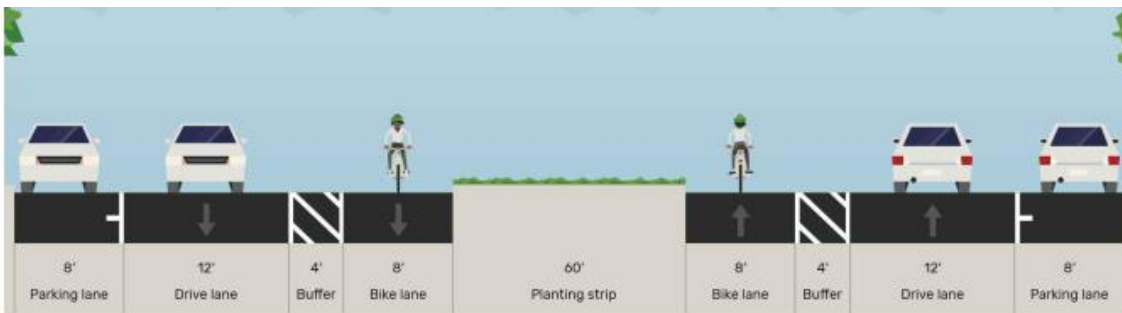
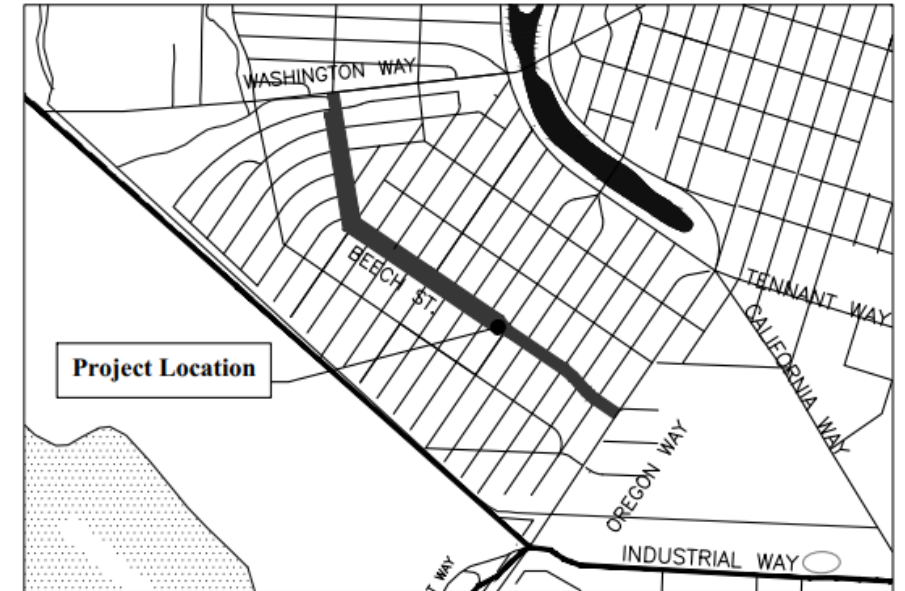
<https://www.strongtowns.org/journal/2023/9/15/how-to-use-optical-narrowing-to-make-a-street-safer>



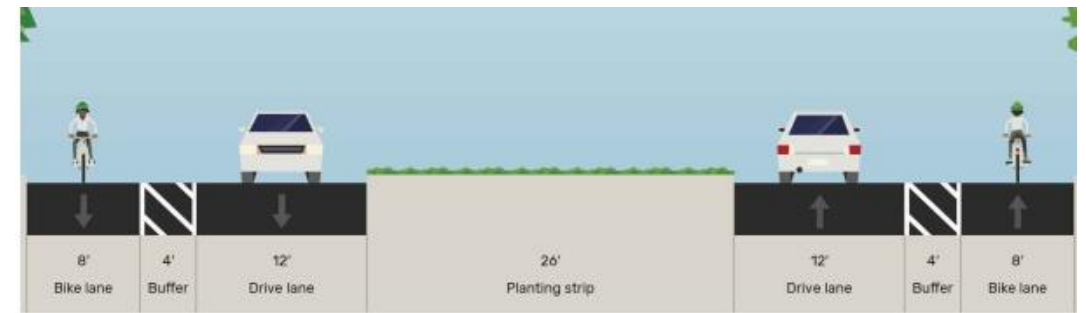
Washington Way



Beech Street

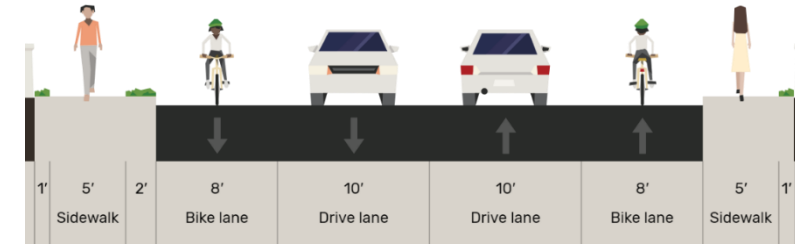
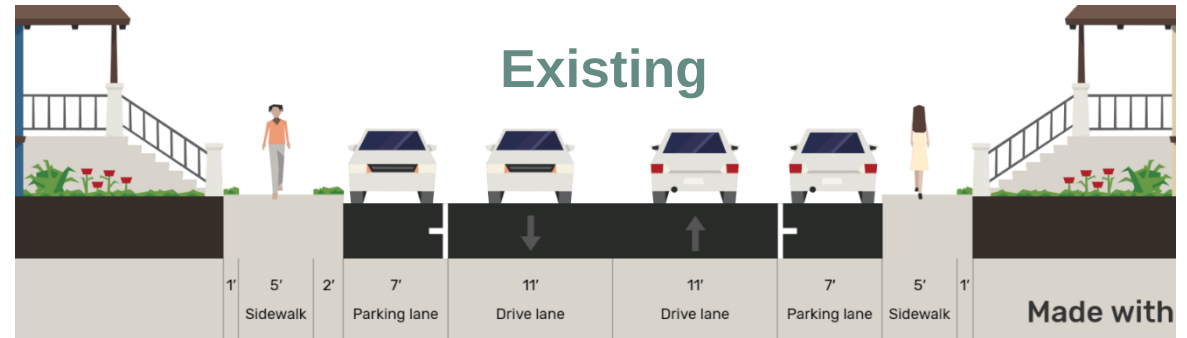
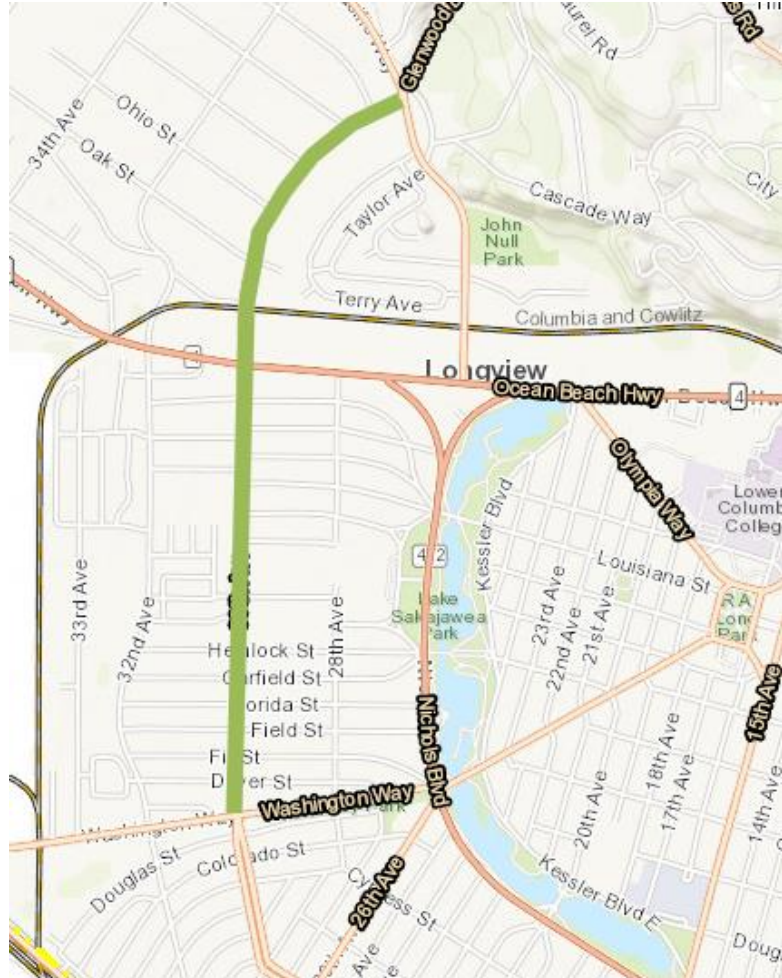


Proposed – Douglas to 20th Ave

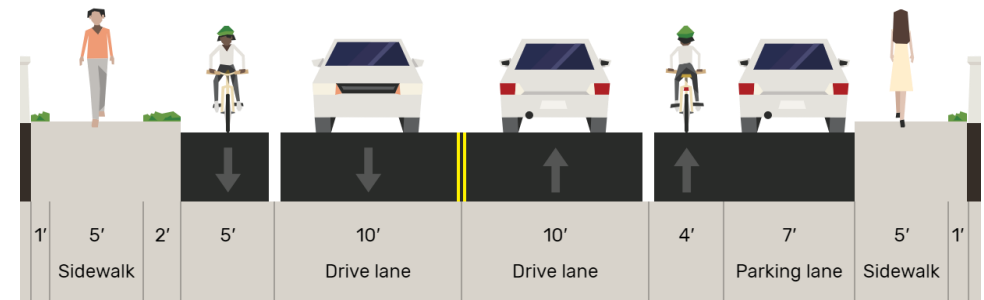


Proposed – 20th Ave to Oregon Way

30th Ave

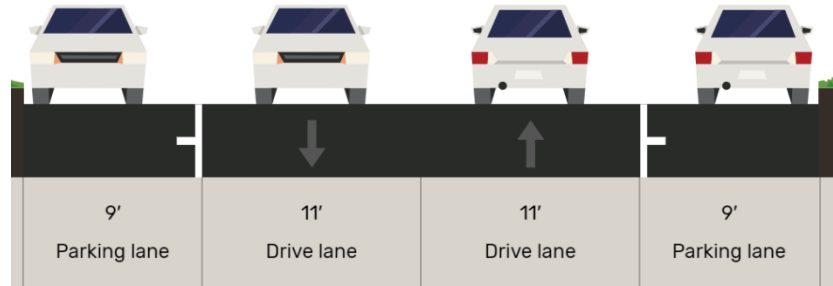


Proposed – No parking

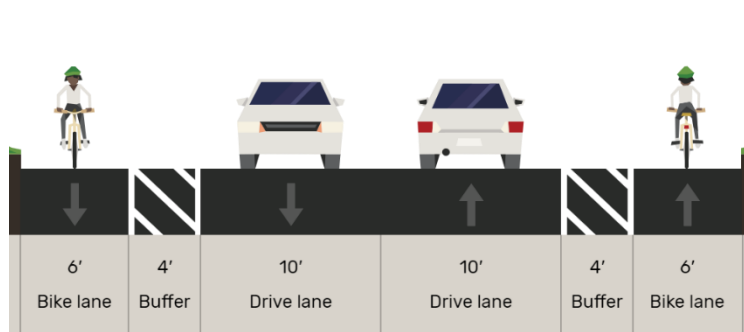
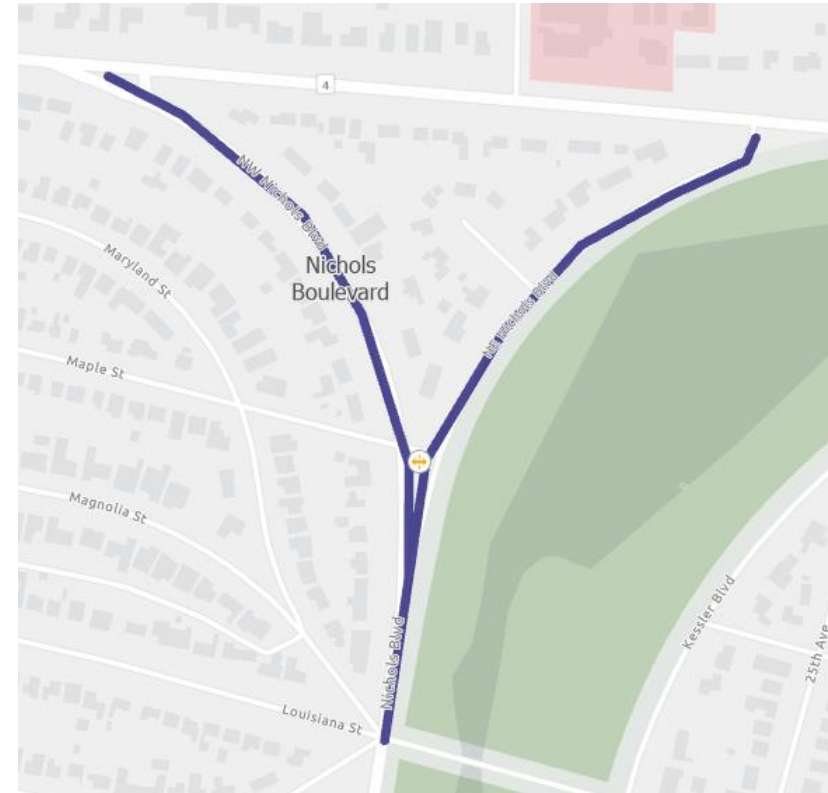


Proposed - East side parking

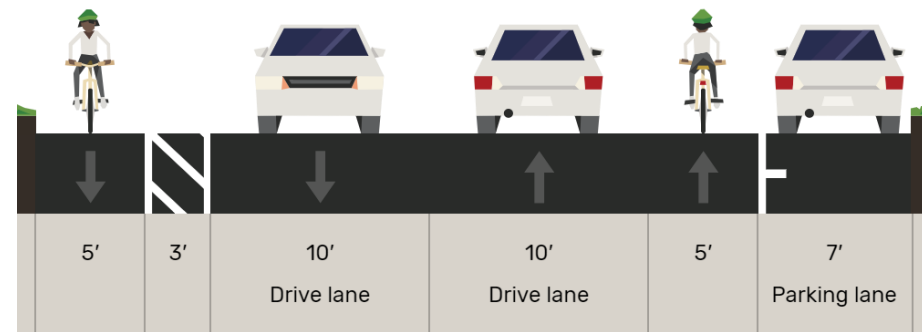
Nichols Blvd



Existing

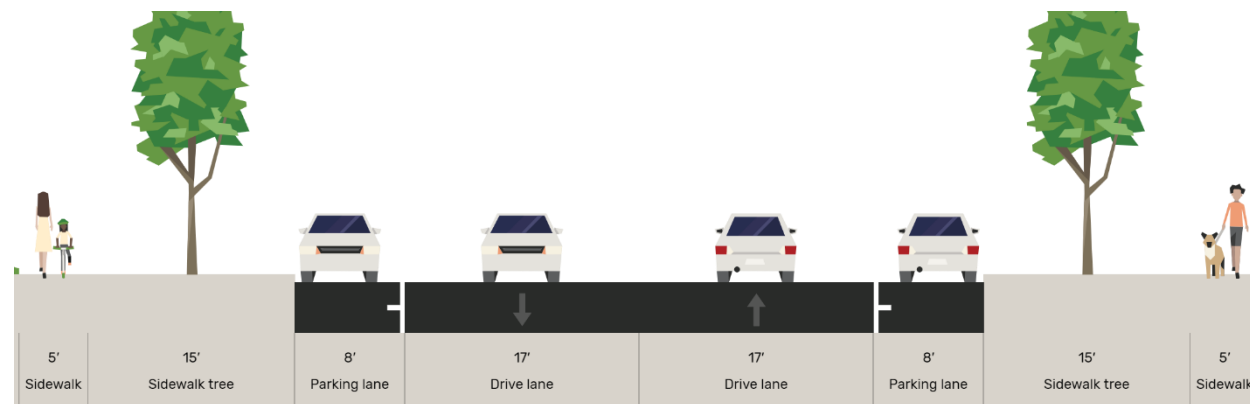
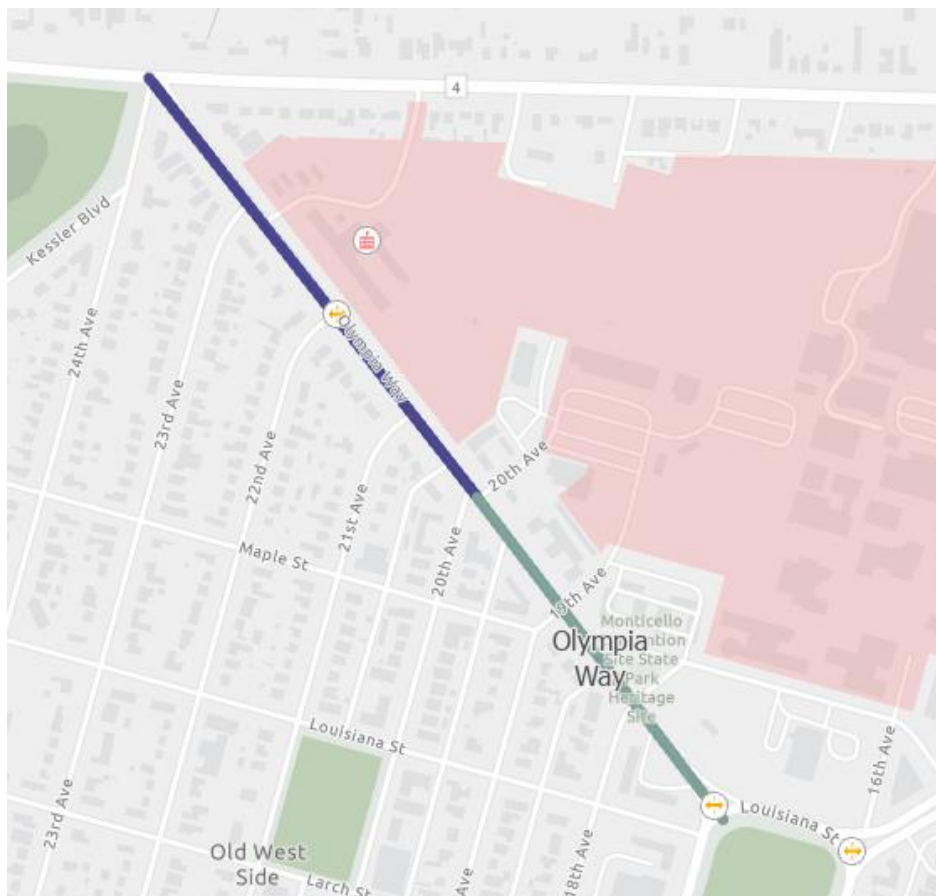


Proposed - NW Nichols

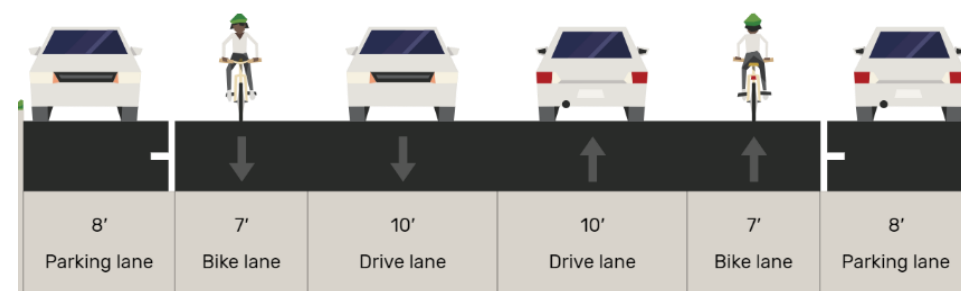


Proposed - NE Nichols

Olympia Way

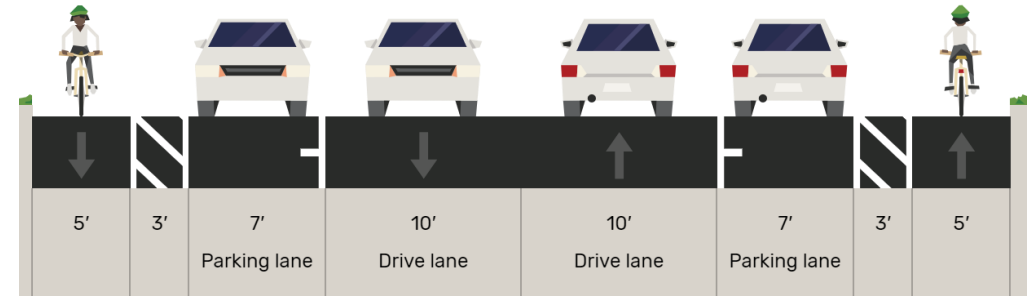
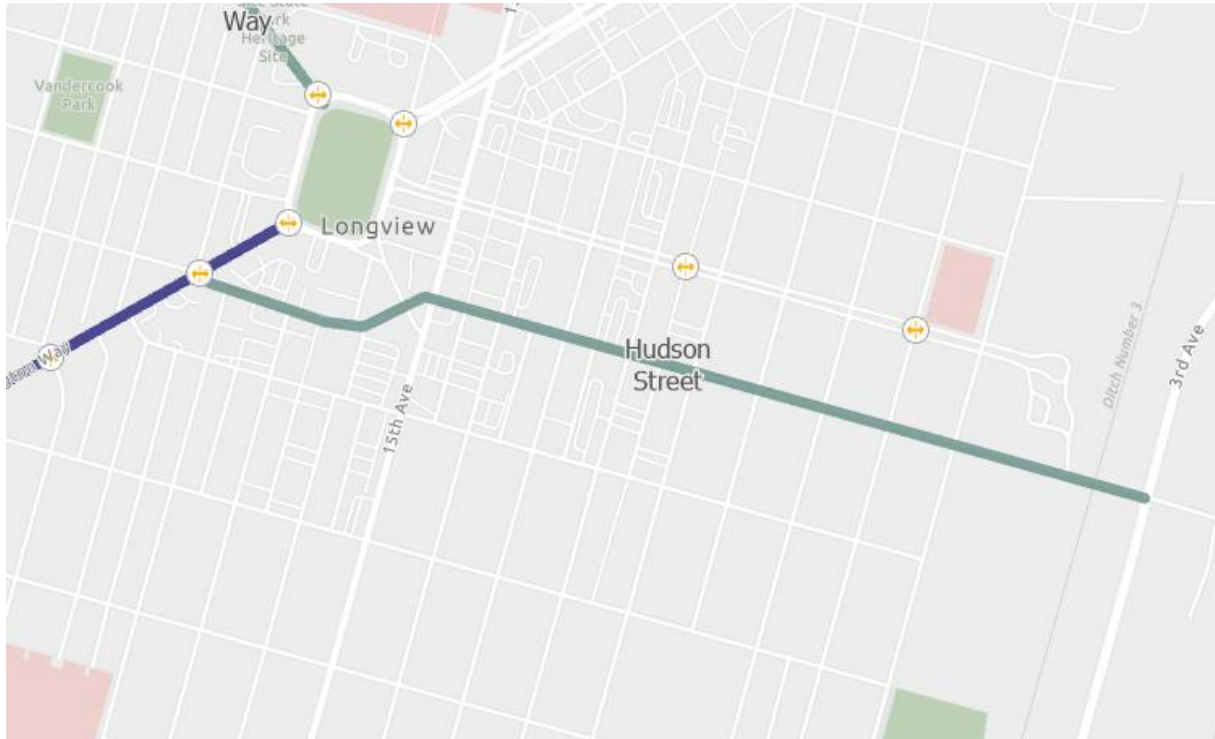


Existing

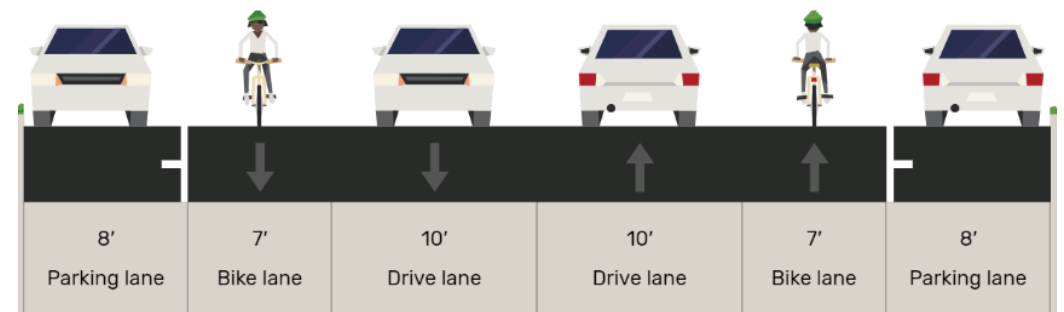


Proposed

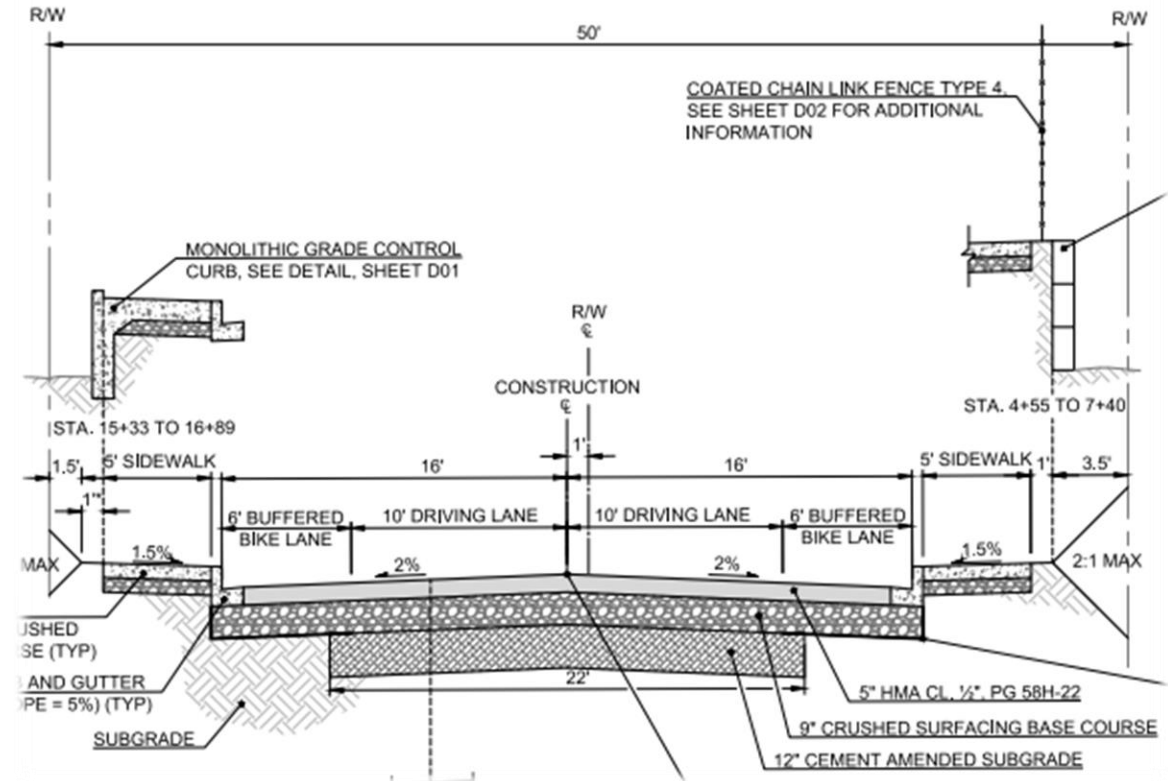
Hudson Street



Parking-Protected



Conventional



Next Steps

1. Outreach/Open House
2. Bidding
3. Award
4. Construction
5. Closeout



City of Longview

Agenda Summary

SEWER ASSET MANAGEMENT PLAN - WALLA WALLA, if time allows

Attachments:

1. WallaWalla

A Sewer Asset Management Case Study

City of Walla Walla



A Sewer Asset Management Case Study – City of Walla Walla



Agenda



Today’s talk:

NOT about “what is asset management”
NOT why you should do asset management
IS how Walla Walla approached asset management of the sewer collection system



Five Step Approach

Data Inventory
Performance Assessment
Condition Assessment
Risk Assessment
Prioritize

A Sewer Asset Management Case Study – City of Walla Walla



The Problem



150 miles of pipe from 6" to 36" diameter.



Estimated \$200M asset.



Significant I/I problems, overflows



City wanted to target 150 pipes for renewal/replacement over 10 years.



No major hydraulic bottlenecks



Condition ratings showed large portion of system in very poor condition – need better way to prioritize

A Sewer Asset Management Case Study – City of Walla Walla



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Objectives

- **Evaluate** existing collection system
 - Create hydraulic model – ID existing bottlenecks & future
 - Develop master plan for extension to serve entire UGA
 - Develop pipe scoring criteria to prioritize replacement
 - Risk of Failure – incorporating City's pipe condition ratings
 - Consequence of Failure – additional criteria to further prioritize
 - Ability to update in-house utilizing GIS

A Sewer Asset Management Case Study – City of Walla Walla



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Objectives – Cont.

- **Develop** 10-year CIP
 - Determine collection system replacement costs
 - Coordinate with IRRP
 - Focus on addressing overflows within next 5 years
 - Incorporate existing improvement plan for WWTP
- **Document** financial condition and ability to fund CIP
- **Satisfy** WDOE requirements for a General Sewer Plan

A Sewer Asset Management Case Study – City of Walla Walla



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Step 1 – Data Inventory

Compile the data you already have

- Location Mapping
- Condition assessments (CCTV inspection) Granite
- Maintenance history (cleaning frequency and causes)
- Collapses and emergency repairs
- Customer complaints
- Basement backups
- Previous evaluations (master plans, flow studies)
- Institutional knowledge

A Sewer Asset Management Case Study – City of Walla Walla



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Walla Walla – GIS

City began developing GIS system in 2000.

City has dedicated GIS department

GIS data for each pipe includes: material, date of install, invert elevations.

GIS track locations of backup claims.

Track “hot list” of spots visited monthly and quarterly for preventative maintenance.

A Sewer Asset Management Case Study – City of Walla Walla



Data Inventory - CCTV

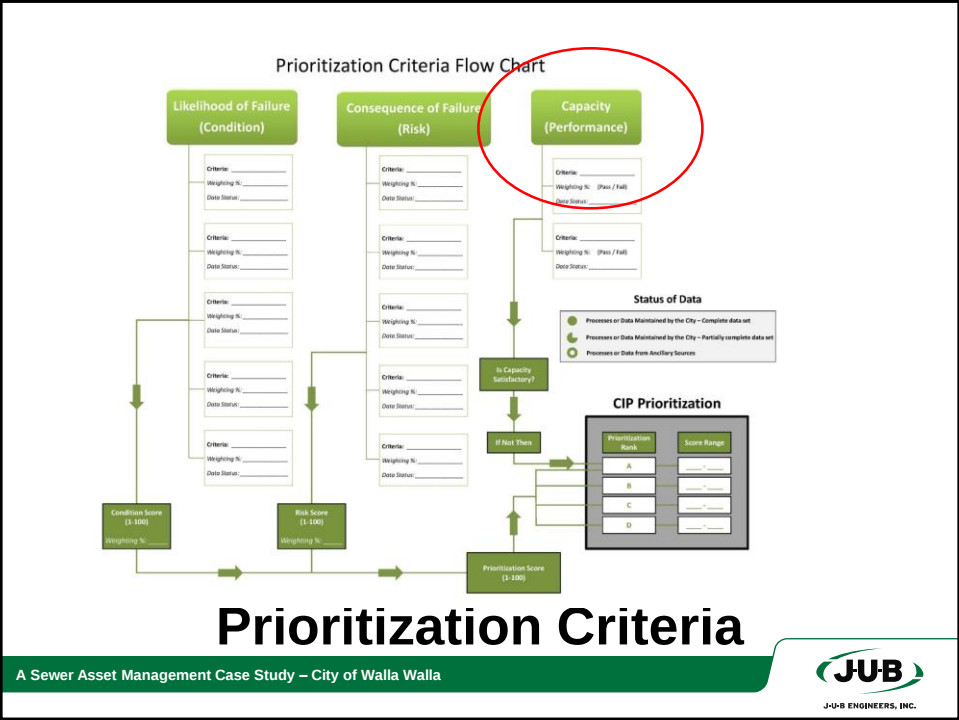
City began CCTV of sewer system in 1990.

CCTV 20% of system each year.

City has reviewed tapes and determined condition scores for all pipes in the system – using Granite XP software

A Sewer Asset Management Case Study – City of Walla Walla





Step 2 – Performance Assessment



HYDRAULIC CAPACITY
(EXISTING AND FUTURE)



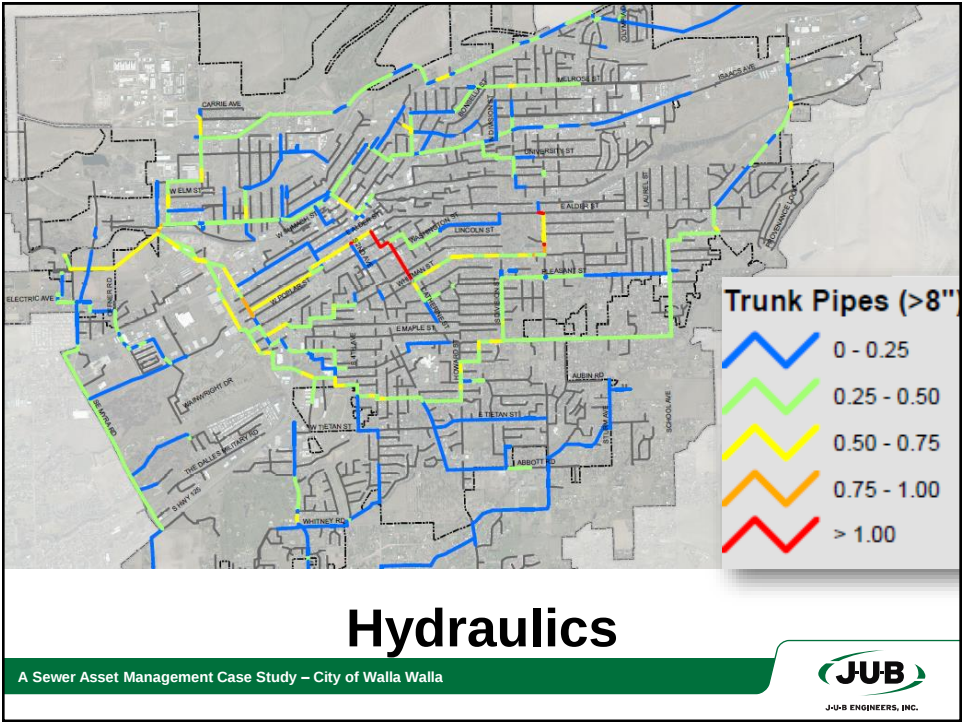
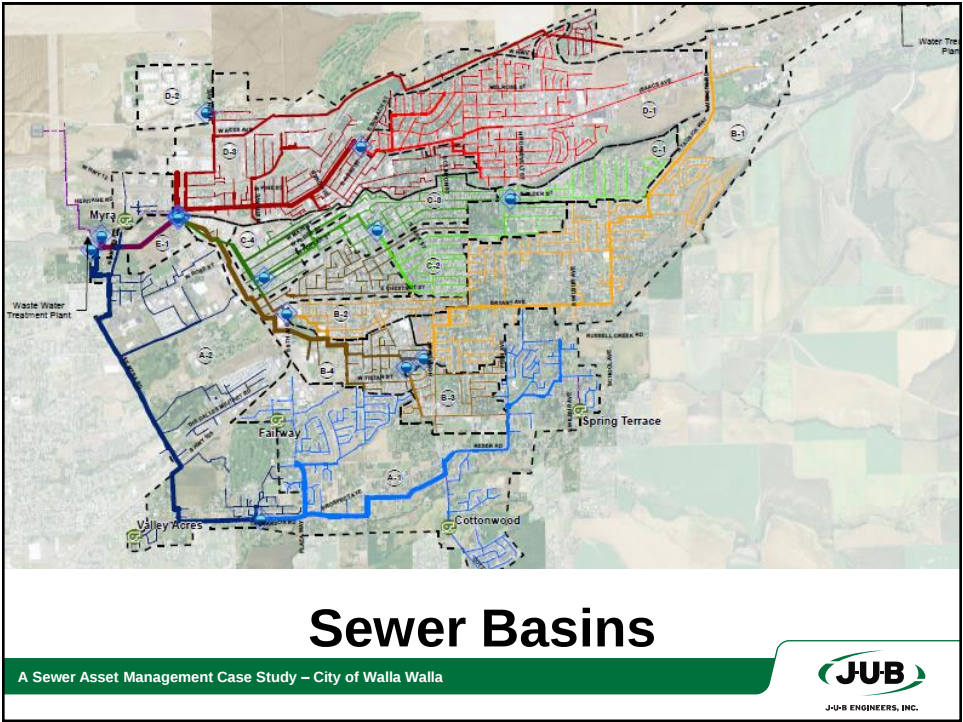
FLOW DATA UTILIZED
WINTER WATER SERVICE
METER DATA

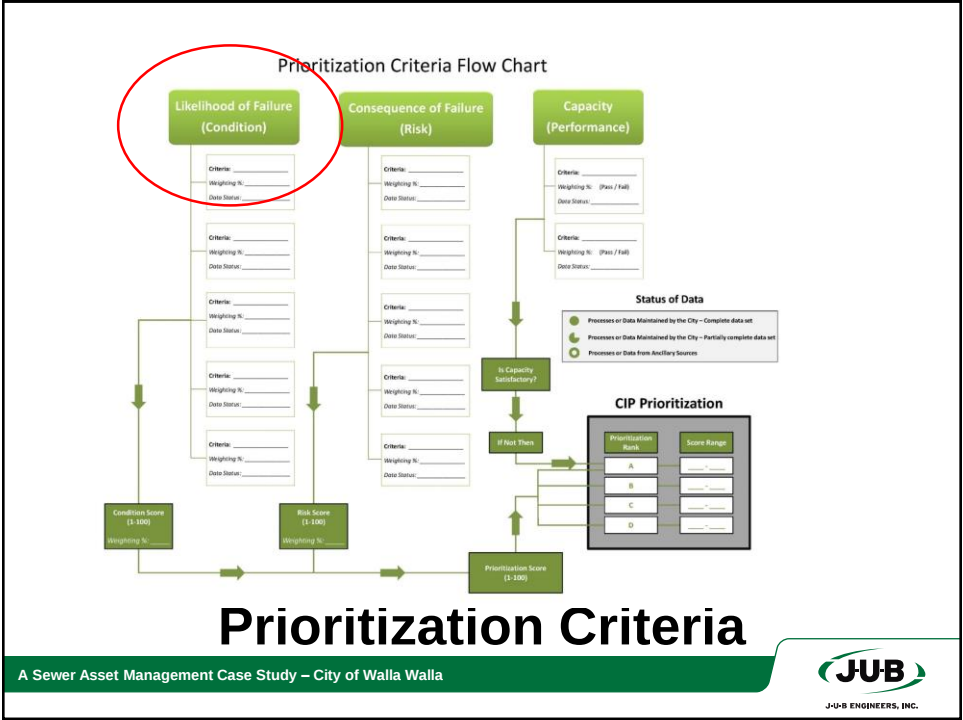


HYDRAULIC MODEL -
CALIBRATED WITH FIELD
DATA



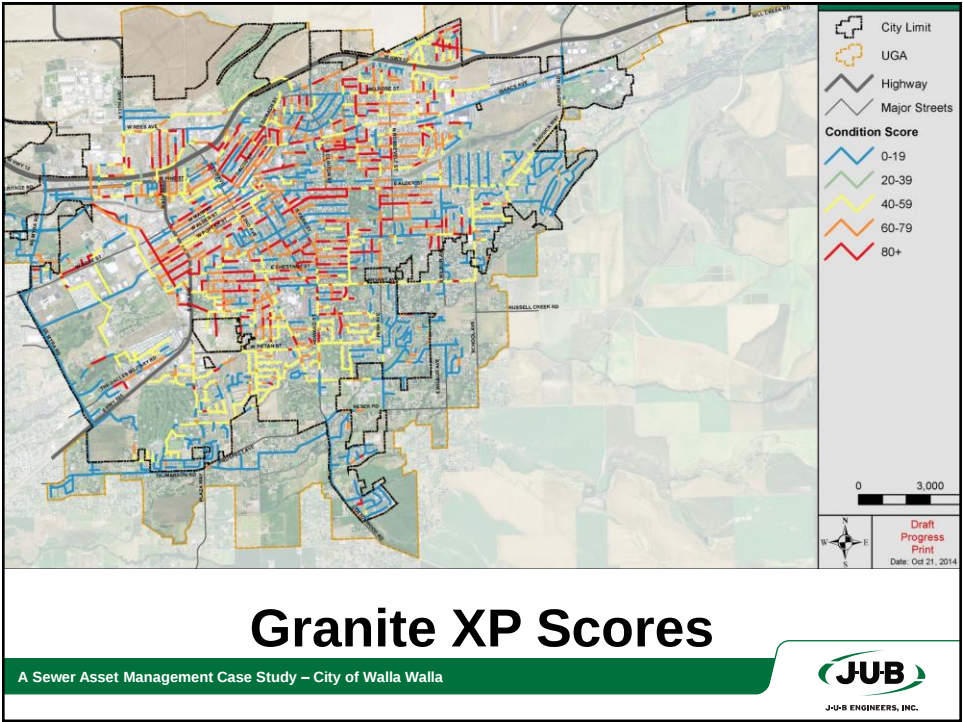
ASSESSMENT SHOWED A
FEW BOTTLENECKS – BUT
NOTHING SIGNIFICANT.





Step 3 – Condition Assessment

- “Likelihood of Failure” - LOF
- Pipe and manhole inspection
- Condition assessment methods:
 - Subjective grading – visual inspection
 - Distress-based evaluation – defect coding
 - Non-Destructive Testing Methods

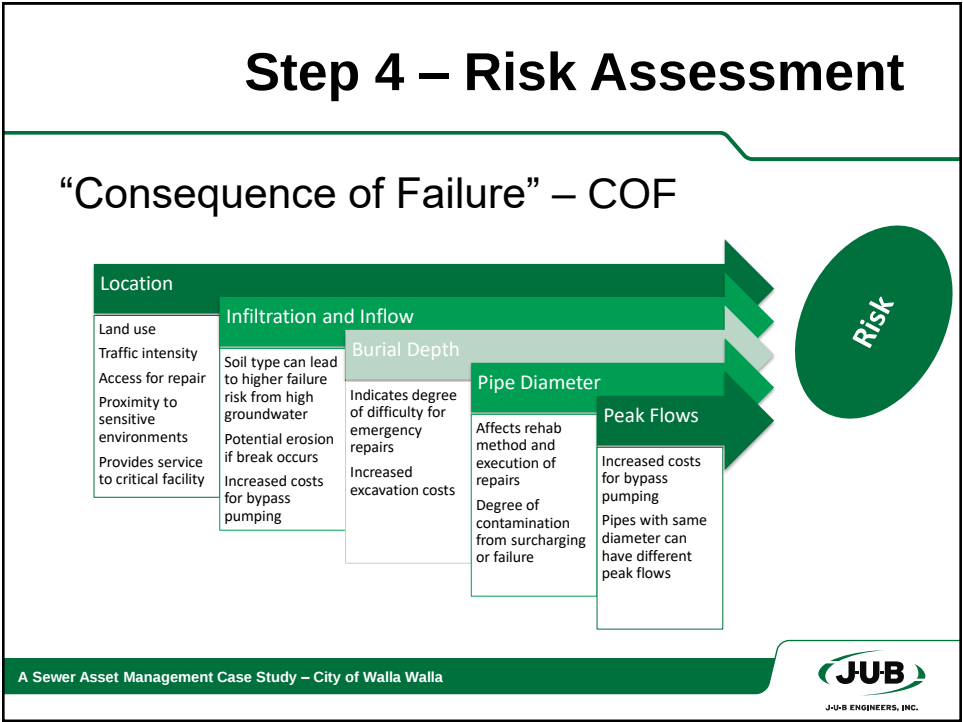
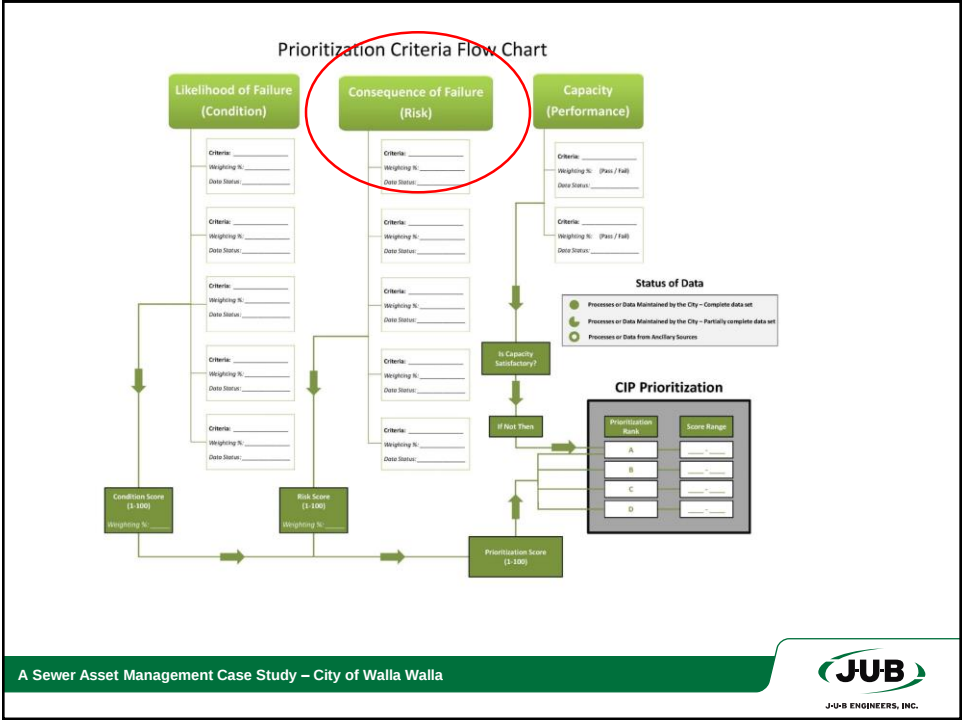


Walla Walla LOF Score

- 50% - Granite Pipe Score
- 10% - Pipe Material (Conc 100, Clay 90, DI 80, PVC 0)
- 10% - Time since last CCTV inspection
- 30% - O & M Frequency (Monthly 100, Qtr 50, Routine 0)
- +20 – Overflow/claim
- +40 – 2x Overflow/claim
- +10 – 6-inch diameter pipes

A Sewer Asset Management Case Study – City of Walla Walla

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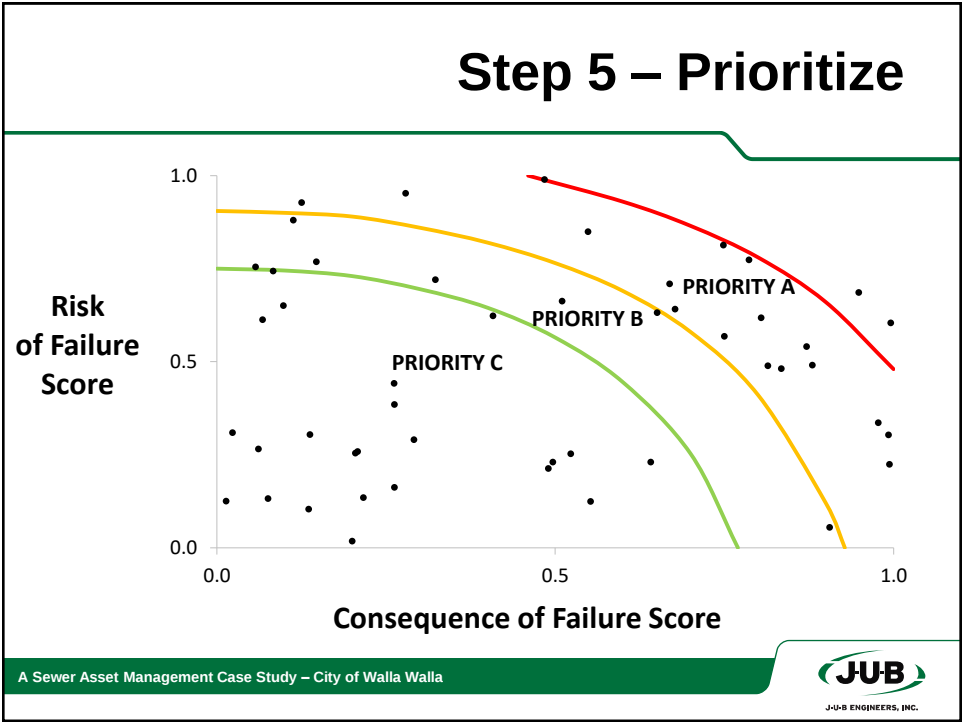


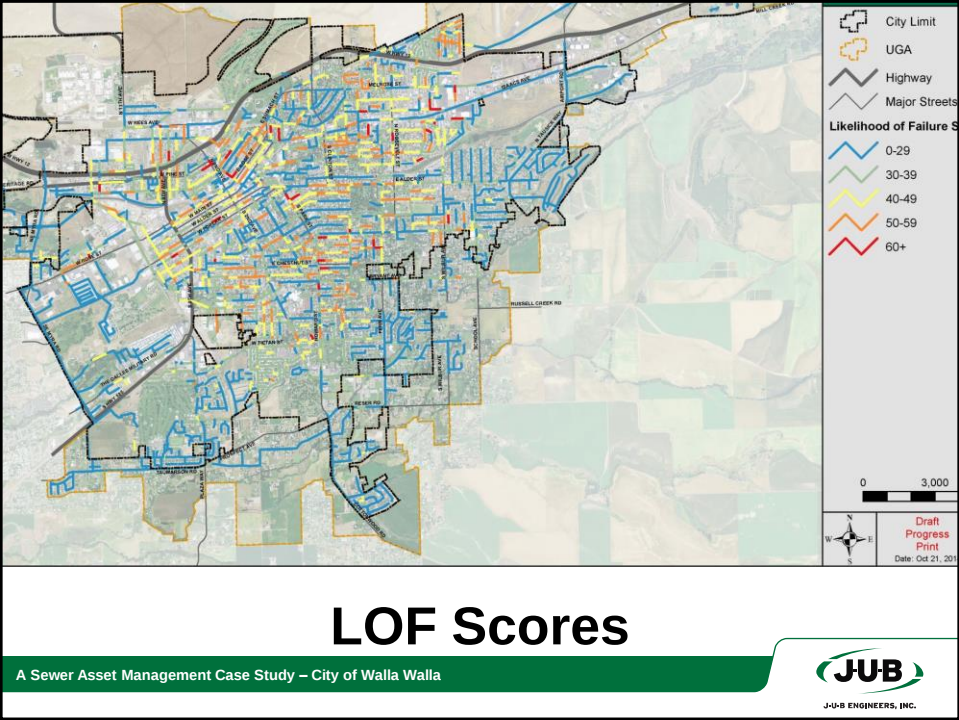
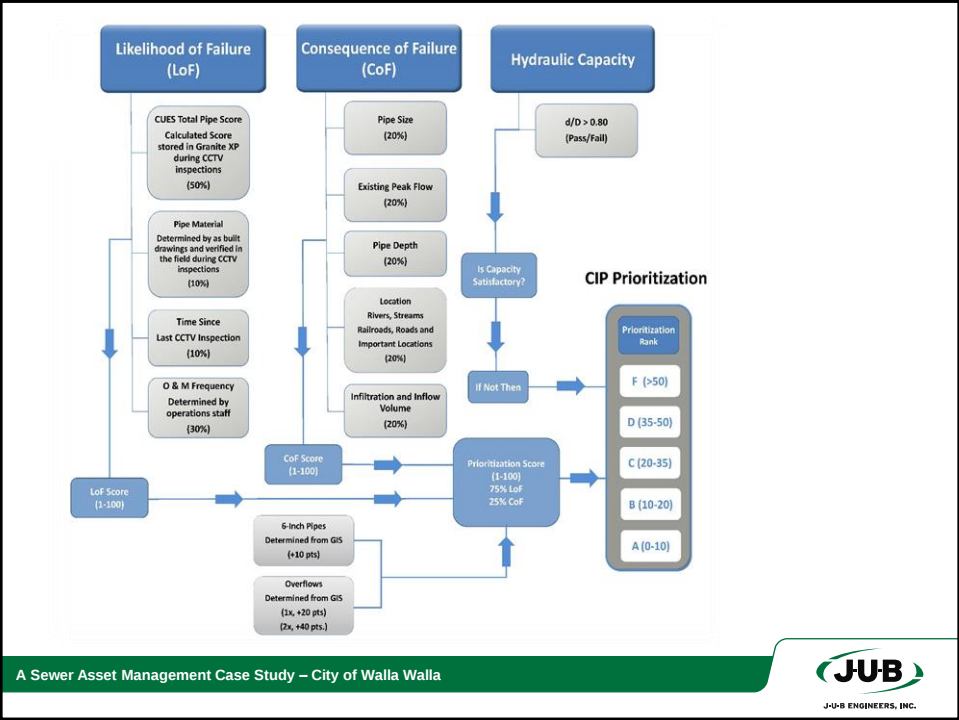
Walla Walla COF Score

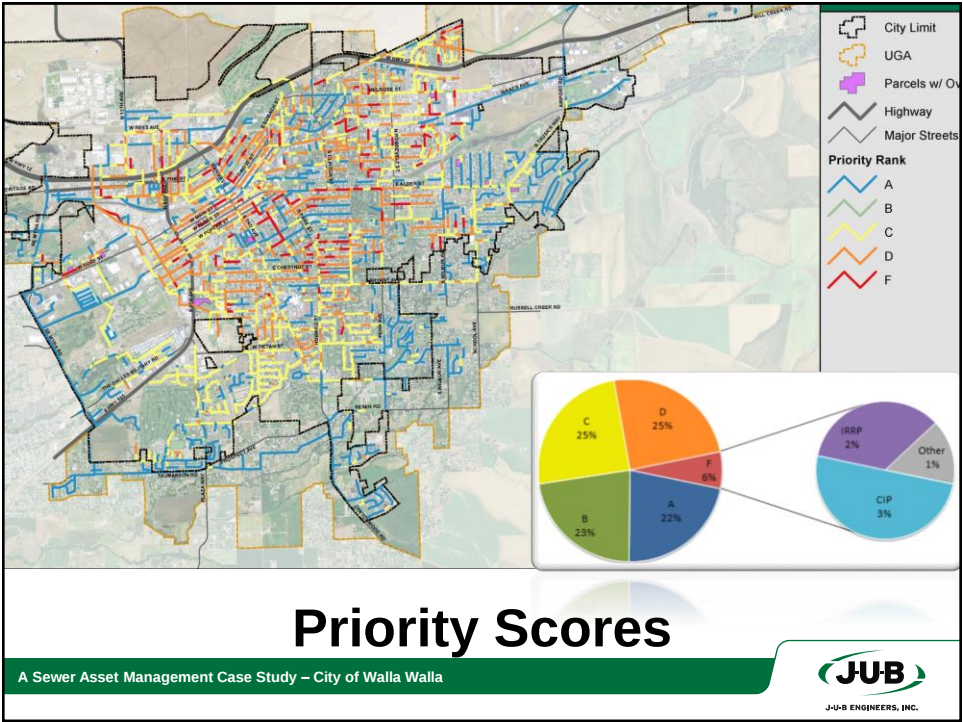
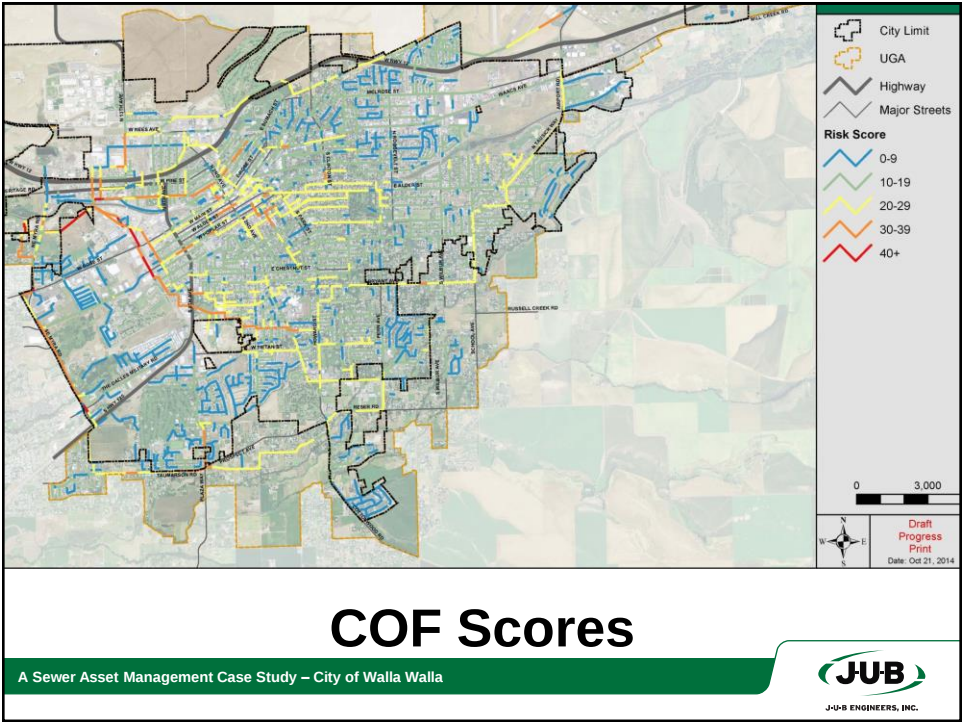
- 20% - Pipe Diameter (36"-100, 18"-50, 8"-10)
- 20% - Peak Flow (scaled by highest peak flow in system)
- 20% - Pipe Depth (30'-100, 15'-40, 10'-20)
- 20% - Location (Distance from major waterway, road classifications, Railroad, and local important locations such as Historic Downtown, State Penitentiary, VA Hospital, Schools)
- 20% - I & I Volume (scaled by highest I/I in system)

A Sewer Asset Management Case Study – City of Walla Walla

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Capital Improvement Plan

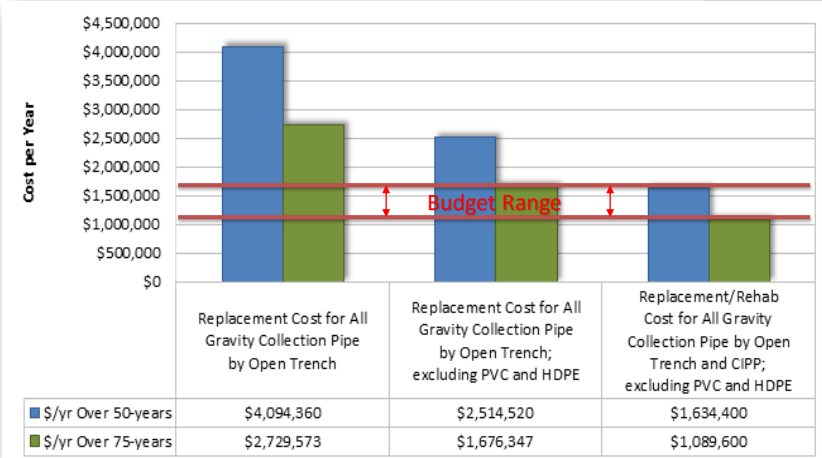
- “F” assigned to pipes with score > 50
- 129 pipes – 6% of system
 - 43% already planned for replacement – IRRP
 - Remaining 73 pipes mapped, developed CIP
 - Expanded projects to include adjacent “D” rated pipes where it made sense to
 - Resulted in 200 pipe segments in CIP
 - Approximately \$15M over next 10 years

A Sewer Asset Management Case Study – City of Walla Walla



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Estimated Yearly Replacement



	Replacement Cost for All Gravity Collection Pipe by Open Trench	Replacement Cost for All Gravity Collection Pipe by Open Trench; excluding PVC and HDPE	Replacement/Rehab Cost for All Gravity Collection Pipe by Open Trench and CIPP; excluding PVC and HDPE
■ \$/yr Over 50-years	\$4,094,360	\$2,514,520	\$1,634,400
■ \$/yr Over 75-years	\$2,729,573	\$1,676,347	\$1,089,600

A Sewer Asset Management Case Study – City of Walla Walla



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Summary

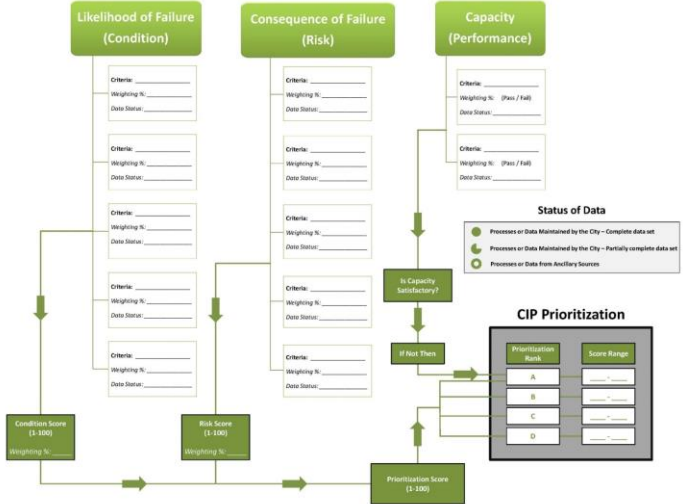
- Not rocket science – you can do it
- **START GATHERING DATA! (GIS)**
 - Pipe Material
 - Condition ratings
 - Time since last CCTV inspection
 - O & M Frequency
 - Sewer back-up/claim

A Sewer Asset Management Case Study – City of Walla Walla



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Prioritization Criteria Flow Chart



Conditions Score (1-100)

Risk Score (1-100)

Prioritization Score (1-100)

Is Capacity Satisfactory?

If Not Then

CIP Prioritization

Prioritization Rank	Score Range
A	1-25
B	26-50
C	51-75
D	76-100

Status of Data

- Processed or Data Maintained by the City – Complete data set
- Processed or Data Maintained by the City – Partially complete data set
- Processed or Data from Auxiliary Sources

A Sewer Asset Management Case Study – City of Walla Walla



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Questions?

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Alex Fazzari, PE
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