



**Department of Commerce**

# Creating A Game-Winning Infrastructure Playbook

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## We strengthen communities

The Department of Commerce touches every aspect of community and economic development. We work with local governments, businesses and civic leaders to strengthen communities so all residents may thrive and prosper.



Planning



Infrastructure



Community Facilities



Housing



Safety / Crime Victims



Business Assistance

 Department of Commerce 2

## Strategic Decision Makers



- Makes financial decisions
- Recruits and develops the appropriate personnel
- Selects the appropriate playbook for game day

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## The Team



- Collaborates with coaches on playbook
- Implements the game plan
- Working publicly and behind the scenes to achieve the organization's mission

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# The Community



- Coaches and players are working to support the fan base
- Directly impacted by the success (and failures) of the organization

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## Overview of Capital Facilities Planning:

*Integrating Land Use, Infrastructure, and Budgets*

# Planning for Success



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# Fully or Partially Planning



- Capital Facilities Element is required by statute for jurisdictions fully planning under the GMA
- Planning ahead for capital investments supports project prioritization, coordination on related projects, & leverage loan and grant opportunities

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## Capital Facilities Defined: WAC 365-196-415



### **At a minimum a Capital Facilities Plan must include:**

- Water systems
- Sanitary sewer systems
- Storm water facilities
- Reclaimed water facilities
- Schools
- Parks and recreation facilities
- Police and fire protection facilities

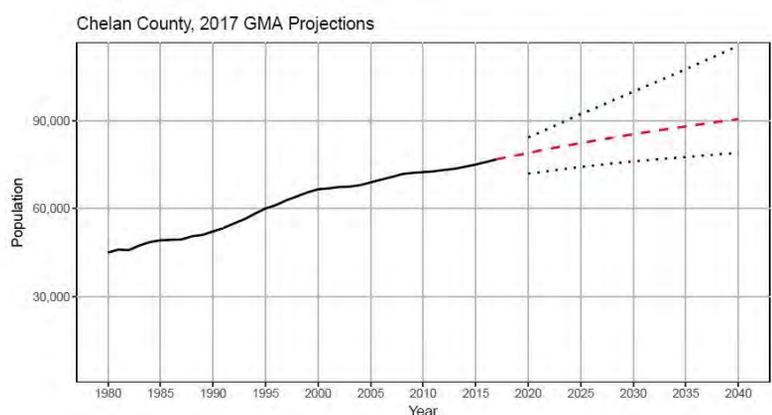
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## Capital Facilities Plan Requirements RCW 36.70A.070(3)

- An inventory of existing capital facilities owned by public entities, showing location and capacity
- A forecast of future needs
- Proposed locations and capacities of expanded or new capital facilities
- At least a 6 year financing plan with projected funding capacities that identifies the source of public funds
- A requirement to reassess the land use element probable funding falls short of meeting existing needs (assurance that land use, capital facilities, parks, and financing are consistent)

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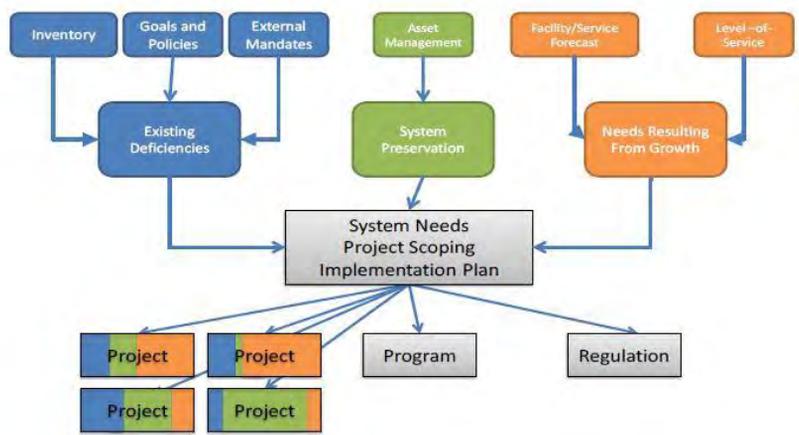
# Forecasting Future Needs – Integrating Land Use and Capital Facilities



Source: WA Office of Financial Management  
 — Census/ Estimate ••• High - - - Medium ••• Low

\*The OFM medium series is the most likely projection

# Forecasting Future Needs: WAC 365-916-415(2)(b)



## Working Across Departments

**Challenges**

- A large number of departments and competing interests
- Projects without a dedicated funding source may compete with a variety of other priorities for general funds

**Opportunities**

- Identify priorities during the CFP planning process
- Consider developing written financing policies regarding capital expenditures
- Approach that aligns comprehensive plan strategies with the financing plan

CFP Team

Finance

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## Financing Plans

WAC 365-196-415(2)(c)

- Budgeting decisions must be consistent with comprehensive plans
- GMA requires a detailed and realistic six-year financing plan.
- Forecast projected funding capacities based on revenues available under existing laws and ordinances. May also consider public or private sources of revenue that are reasonably available.
- Governments also have the responsibility to develop a financing plan that considers the life of the plan based on growth projections
- Rates should be set to recover full cost of system (Operation and maintenance, debt, adding new capacity)

# Capital Facilities Plans: 6 and 20 Years

Example: City of Olympia Six-Year CFP

2014-2019 CAPITAL FACILITIES PLAN  
COST BY FUNDING SOURCE  
\$122,101,887



	2014	2015-2019	TOTAL
CIP Fund	\$ 1,724,800	\$ 15,168,110	\$ 14,892,910
Grants	\$ 465,000	\$ 21,629,567	\$ 22,094,567
Impact Fees	\$ 666,213	\$ 26,174,459	\$ 26,840,672
Other	\$ 1,836,323	\$ 10,622,875	\$ 12,458,900
Rates	\$ 4,965,100	\$ 23,875,300	\$ 28,240,400
SEPA Mitigation	\$ 2,338	\$ 241,000	\$ 243,938
TBD	\$ 620,000	\$ 3,100,000	\$ 3,720,000
Voted Utility Tax	\$ 2,535,250	\$ 11,075,250	\$ 13,610,500
Total	\$ 12,215,826	\$ 109,886,061	\$ 122,101,887

2014-2019 CAPITAL FACILITIES PLAN COST  
BY PROJECT CATEGORY  
\$122,101,887

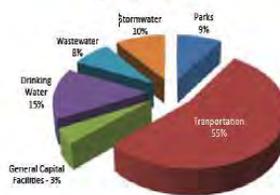


Table 1.1

	2014	2015-2019	TOTAL
Parks	\$ 1,900,250	\$ 9,610,250	\$ 11,518,500
Transportation	\$ 3,502,451	\$ 63,773,836	\$ 67,276,287
General Capital Facilities	\$ 411,525	\$ 2,069,575	\$ 2,481,100
Drinking Water	\$ 1,826,800	\$ 16,685,900	\$ 18,512,700
Wastewater	\$ 2,333,700	\$ 7,518,500	\$ 9,662,200
Stormwater	\$ 2,733,100	\$ 10,418,000	\$ 12,651,100
Total	\$ 12,215,826	\$ 109,886,061	\$ 122,101,887

- Identifies funding source and project categories
- Comprehensive Plan should include a more general 20 year plan that identifies needs facilities/services based on growth projections
- Land use and other projections must be consistent

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## Relationship Between CFP and Functional Plans



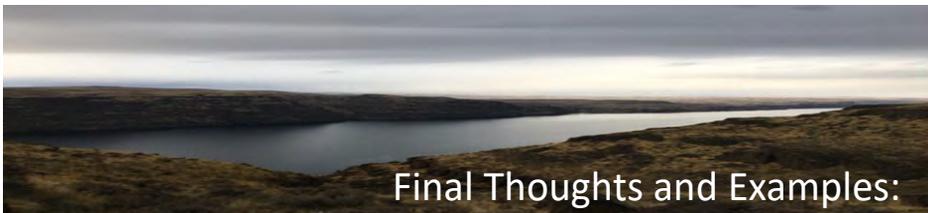
- Separate water system, sanitary sewer, utility, transportation, or other plans support the CFP
- Generally adopted by reference
- Ensure they are and remain consistent with the Comp Plan
- Updates are subject to annual docketing requirements (Ronald Wastewater District v. Snohomish County)
- Services provided by special purpose districts should be summarized, verified, and considered in the Comp Plan

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# Capital Facilities and Public Services Planning



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## Final Thoughts and Examples:

## Implementing your Comprehensive Plan

```

graph TD
    A[Community Vision] --> B[Comprehensive plan goals and policies]
    B --> C[Implementation strategies:  
Development regulations  
Infrastructure spending priorities]
    C --> D["• Every permitted project  
• Every spending decision  
Is consistent with the Vision"]
            
```

- **Development regulations** must be consistent with and implement the comprehensive plan.
- **Capital Improvement Plans (CIP)** priorities for local infrastructure investments must be consistent with the comprehensive plan.
- **Other activities** can implement and must be consistent with the goals of the plan.

## Systems Theory and Planning

### Basic Concepts

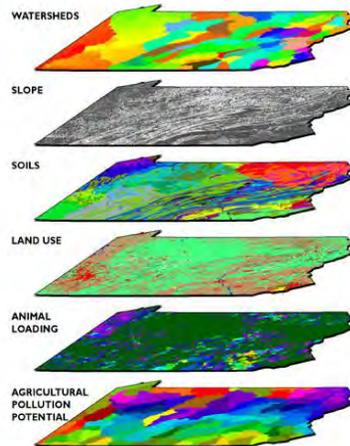
- Everything is a system
- Every system is part of one or more larger systems
- Most systems are open and exchange energy with their environment

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## Systems Theory and Planning:

*"Many of the problems that society confronts are of such inordinate complexity that it takes the greatest dedication and zeal to assemble the necessary data, analyze and prescribe. Happily there are other problems, where a very small perception can produce astonishing results."*

*-Ian McHarg  
Design with Nature, 1971*



Source: Penn State University, Dept. of Geography

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## City of Spokane: Integration and Prioritizing projects

- Integrate with utilities: Stormwater management, public & private utility infrastructure
- Based on Comp Plan goals
- Maintain what we have: Current pavement conditions
- Ensure safety: For all users
- Multi-modal transportation components: Bike lanes, pedestrian improvements, mass transit, freight mobility
- Economic Development opportunities
- Available funding



# Spokane CSO – 1<sup>st</sup> & Adams



# Spokane CSO – Spokane Falls Blvd.



# Examples From Yakima



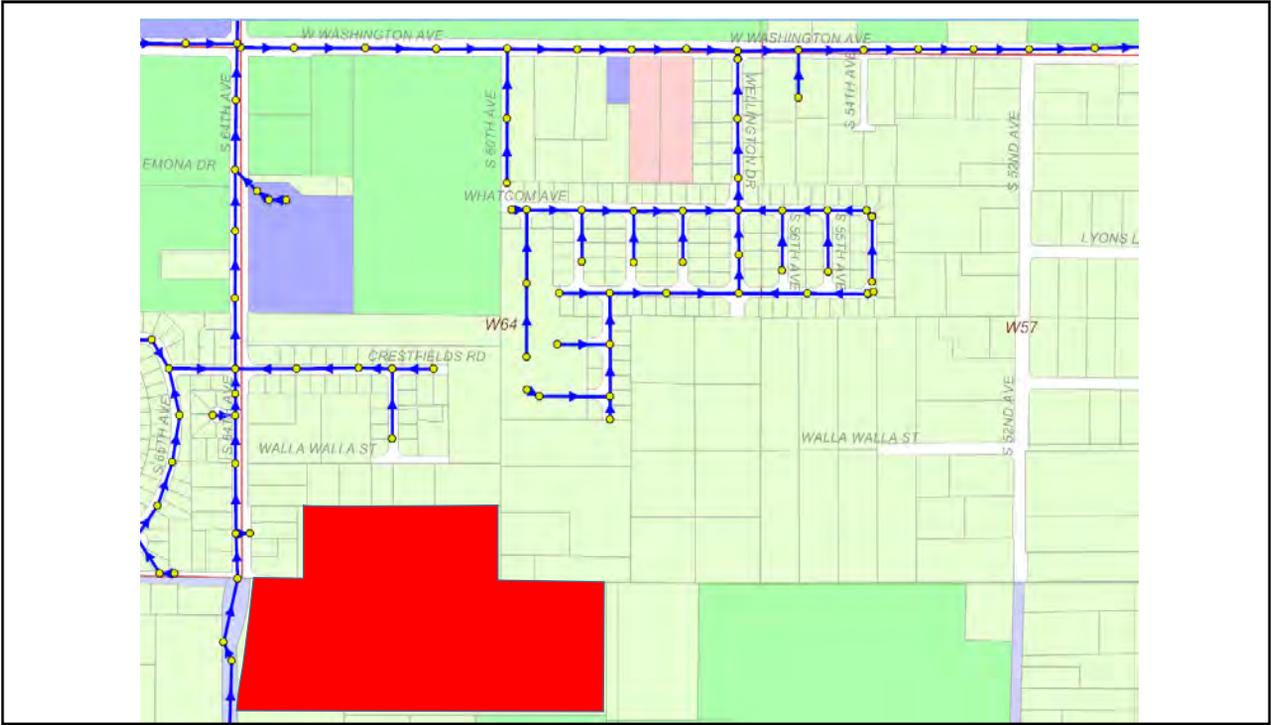


City of Yakima



# Wastewater Collection System Master Plan

FINAL DRAFT  
October 2013

### ES.8 CAPITAL IMPROVEMENT PROGRAM

The Capital Improvement Program (CIP) includes pipelines, lift stations, and force mains recommended for the City's domestic system and the industrial waste system and are summarized in [Table ES.5](#) and [Table ES.6](#), respectively. Each improvement was assigned a uniquely coded identifier associated with its collection basin, and which is used for locating it on corresponding detail sheets.

The estimated construction costs include the baseline costs plus **30 percent** contingency allowance to account for unforeseen events and unknown field conditions. The capital improvement costs also include the estimated construction costs plus **30 percent** project-related costs (engineering design, project administration, construction management and inspection, and legal costs).

This master plan also prioritized the proposed capacity improvements based on their urgency to mitigate existing deficiencies and to serve future growth. The construction triggers include:

- **Improvements to Mitigate Existing Deficiencies.** These are considered near-term improvements and intended to mitigate existing capacity deficiencies. This master plan recommends these improvements be scheduled for construction as soon as possible and as fiscal budgets permit.
- **Expansion Improvements for Future Developments.** These are intermediate-term and long-term improvements intended to service future developments within the UGA. This master plan includes construction triggers, expressed in equivalent dwelling units (EDUs). These triggers identify the equivalent number of residential single family units that can be served by the existing trunk system prior to requiring upsizing or parallel relief. Other triggers are associated with specific developments.

The construction triggers are expressed in equivalent dwelling units (EDUs) to identify the equivalent number of residential single family units that can be served by the existing trunk

October 2013

ES-13

City of Yakima  
Wastewater Collection System  
Master Plan

Table 7.3 Proposed Capacity Improvements for Future Users  
Wastewater Collection System Master Plan  
City of Yakima

Improvement Number	Type of Improvement	Project Location	Flow (MGD)	Collection Point	Flow Pipe Diameter (in)	Length (ft)	Construction Trigger
<b>Washington Avenue Basin Improvements</b>							
WA-1	Pipe	Washington Avenue	From 18th Ave to 20th Ave	Parade	36	740	Construct with 1,700 EDUs
WA-4	Pipe	Washington Avenue	From 21st Ave to 22nd Ave	Parade	36	875	Construct with 1,000 EDUs
WA-5	Pipe	Washington Avenue	From 23rd Ave to 24th Ave	Parade	36	1,125	Construct with 1,000 EDUs
WA-9	Pipe	Washington Avenue	From 27th Ave to 28th Ave	Parade	36	1,375	Construct with 1,000 EDUs
WA-7	Pipe	Washington Avenue	From 29th Ave to 30th Ave	Parade	36	1,125	Construct with 1,000 EDUs
WA-8	Pipe	Washington Avenue	From 31st Ave to 32nd Ave	Parade	36	1,125	Construct with 1,000 EDUs
WA-10	Pipe	Washington Avenue	From 33rd Ave to 34th Ave	Parade	36	1,125	Construct with 1,000 EDUs
WA-11	Pipe	Washington Avenue	From 35th Ave to 36th Ave	Parade	36	1,125	Construct with 1,000 EDUs
WA-12	Pipe	Washington Avenue	From 37th Ave to 38th Ave	Parade	36	1,125	Construct with 1,000 EDUs
WA-13	Pipe	22nd Avenue	From Washington Ave to 22nd Ave	Parade	36	275	Construct with 1,000 EDUs
WA-14	Pipe	Spokane Street	From 29th Ave to 30th Ave	Parade	36	275	Construct with 1,000 EDUs
WA-15	Pipe	Spokane Street	From 31st Ave to 32nd Ave	Parade	36	1,125	Construct with 1,000 EDUs
WA-16	Pipe	Spokane Street	From 33rd Ave to 34th Ave	Parade	36	1,125	Construct with 1,000 EDUs
WA-17	Pipe	17th Avenue	From Spokane St to 17th Ave	Parade	36	875	Construct with 1,000 EDUs
WA-18	Pipe	19th Avenue	From 17th Ave to 18th Ave	Parade	36	1,125	Construct with 1,000 EDUs
WA-19	Pipe	19th Avenue	From 18th Ave to 19th Ave	Parade	36	875	Construct with 1,000 EDUs
WA-20	Pipe	2nd Avenue	From 19th Ave to 20th Ave	Parade	36	875	Construct with 1,000 EDUs
WA-22	Pipe	King Street	From 2nd Ave to 3rd Ave	Parade	36	1,125	Construct with 1,000 EDUs
WA-23	Pipe	London Ave	From King St to 18th Ave	Parade	36	875	Construct with 1,000 EDUs
WA-24	Pipe	Alford Avenue	From London Ave to 18th Ave	Parade	36	875	Construct with 1,000 EDUs
WA-25	Pipe	Alford Avenue	From 18th Ave to 19th Ave	Parade	36	875	Construct with 1,000 EDUs
WA-26	Pipe	City Right of Way	From Alford Ave to 18th Ave	Parade	36	875	Construct with 1,000 EDUs
WA-27	Pipe	City Right of Way	From Alford Ave to 19th Ave	Parade	36	1,125	Construct with 1,000 EDUs
WA-28	Pipe	2nd Avenue	From 19th Ave to 20th Ave	Parade	36	1,125	Construct with 1,000 EDUs
WA-30	Pipe	3rd Ave	From 20th Ave to 21st Ave	Parade	36	875	Construct with 1,000 EDUs
WA-31	Pipe	3rd Avenue	From 21st Ave to 22nd Ave	Parade	36	875	Construct with 1,000 EDUs
WA-32	Pipe	3rd Avenue	From 23rd Ave to 24th Ave	Parade	36	1,125	Construct with 1,000 EDUs
<b>Spring Creek Trunk</b>							
WA-33	Pipe	Spring Creek	From 18th Ave to 19th Ave	Parade	36	1,125	Construct with development in 18th Ave area
WA-34	Pipe	Spring Creek	From 19th Ave to 20th Ave	Parade	36	1,125	Construct with development in 19th Ave area
WA-35	Pipe	Spring Creek	From 20th Ave to 21st Ave	Parade	36	1,125	Construct with development in 20th Ave area
WA-36	Pipe	Spring Creek	From 21st Ave to 22nd Ave	Parade	36	1,125	Construct with development in 21st Ave area
WA-37	Pipe	Spring Creek	From 22nd Ave to 23rd Ave	Parade	36	1,125	Construct with development in 22nd Ave area
<b>Wine Trunk</b>							
WA-38	Pipe	Wine Trunk	From 18th Ave to 19th Ave	Parade	36	1,125	Construct with development in 18th Ave area
WA-39	Pipe	Wine Trunk	From 19th Ave to 20th Ave	Parade	36	1,125	Construct with development in 19th Ave area
WA-40	Pipe	Wine Trunk	From 20th Ave to 21st Ave	Parade	36	1,125	Construct with development in 20th Ave area
WA-41	Pipe	Wine Trunk	From 21st Ave to 22nd Ave	Parade	36	1,125	Construct with development in 21st Ave area
WA-42	Pipe	Wine Trunk	From 22nd Ave to 23rd Ave	Parade	36	1,125	Construct with development in 22nd Ave area
WA-43	Pipe	Wine Trunk	From 23rd Ave to 24th Ave	Parade	36	1,125	Construct with development in 23rd Ave area
WA-44	Pipe	Wine Trunk	From 24th Ave to 25th Ave	Parade	36	1,125	Construct with development in 24th Ave area

