

The background of the slide features a photograph of the Vancouver City Hall building on the left, characterized by its curved facade and large glass windows. The words "VANCOUVER CITY HALL" are visible on the building's exterior. On the right side, there are vibrant pink and purple flowers in full bloom, partially obscuring the building. A semi-transparent dark grey banner is overlaid across the top half of the image, containing the main title and date.

# City of Vancouver Pavement Management Program

March 1, 2022

Transportation & Mobility Commission

Ryan Miles – Street Operations Program Manager

The logo for the City of Vancouver, Washington, is located in the bottom left corner. It features the words "CITY OF" in a small font above the word "Vancouver" in a large, bold, white sans-serif font. Below "Vancouver" is the word "WASHINGTON" in a smaller, white sans-serif font. A white wavy line graphic is positioned beneath the text.

CITY OF  
**Vancouver**  
WASHINGTON

# Presentation Overview

- Program Information and Summary Overview
- 2022 Pavement Program
- 2023 & 2024 Preliminary Pavement Program
- Program in Future Years
- Questions and Discussion

# Presentation Purpose

- Provide an overview of the City's Pavement Management Program
- Provide information about the 2022 program as well as the 2023 & 2024 preliminary pavement management programs
- Respond to questions about the overall program and planned future investments
- Receive feedback on the overall program and planned future investments

# Council Policies that Guide PM Program

- Street Funding Strategy Guiding Principles and Outcomes
  - “Take care of what we have”
  - Over a 20-year period, improve pavement conditions from Fair to Good
- City Budget Capital Planning and Asset Management Policies
  - #33 – Pursue an asset management strategy that prioritizes safety, equity, and climate action
- The City’s Complete Streets ordinance requires roadway investments to provide a safe, accessible street system that serves all users, ages and abilities, regardless of mode of travel.

# Pavement Management Goals & Objectives

- Extend the life of existing pavements over the entire network for as long as possible – “Take care of what we have”
- Maintain overall network conditions
- Improve overall citywide pavement conditions from “fair” to “good” over 20 years
- Spread work around entire City to ensure benefits distributed evenly and equitably
- Coordinate with Transportation Planning to leverage pavement investments to build complete streets

# Vancouver's Pavement Network

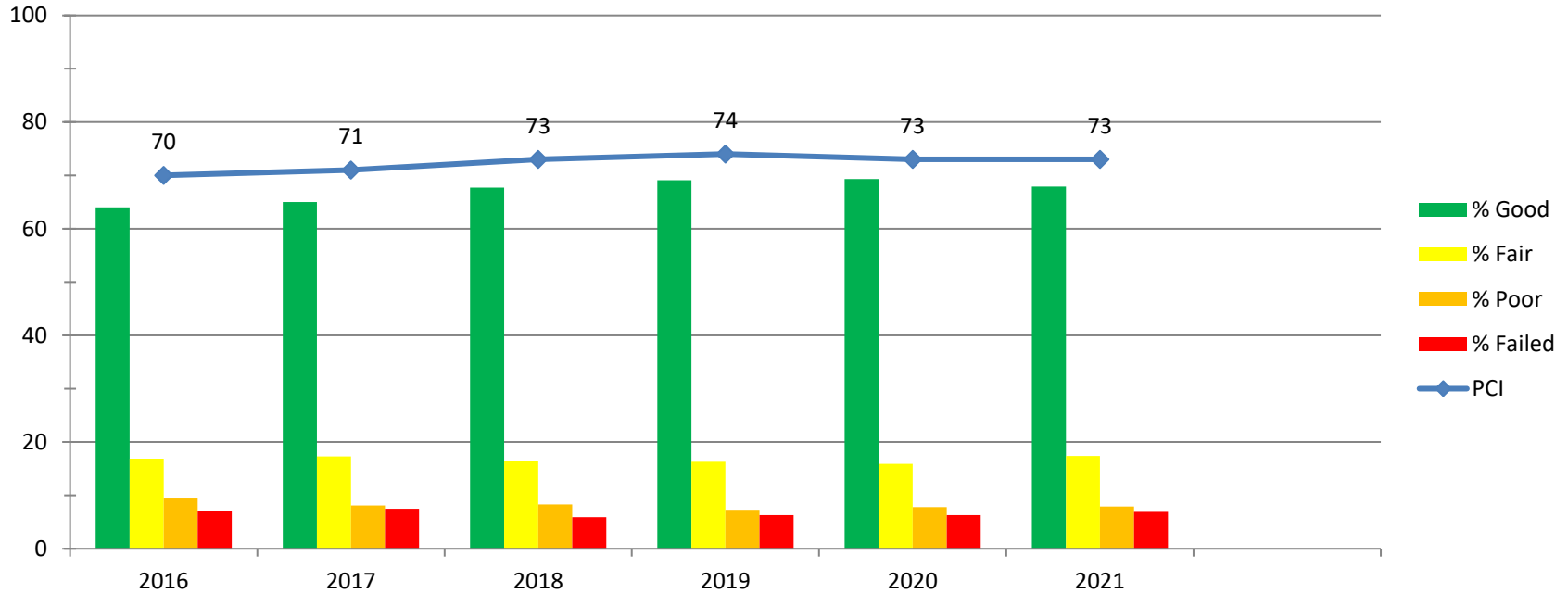
- 600+ centerline miles (1,900+ lane miles)
- Manage over 7,000 segments
- 30% Arterial Streets; 70% Residential Streets
- Current Network PCI = 73 (0 to 100)

Good+	Fair	Poor	Very Poor
69%	17%	7%	7%

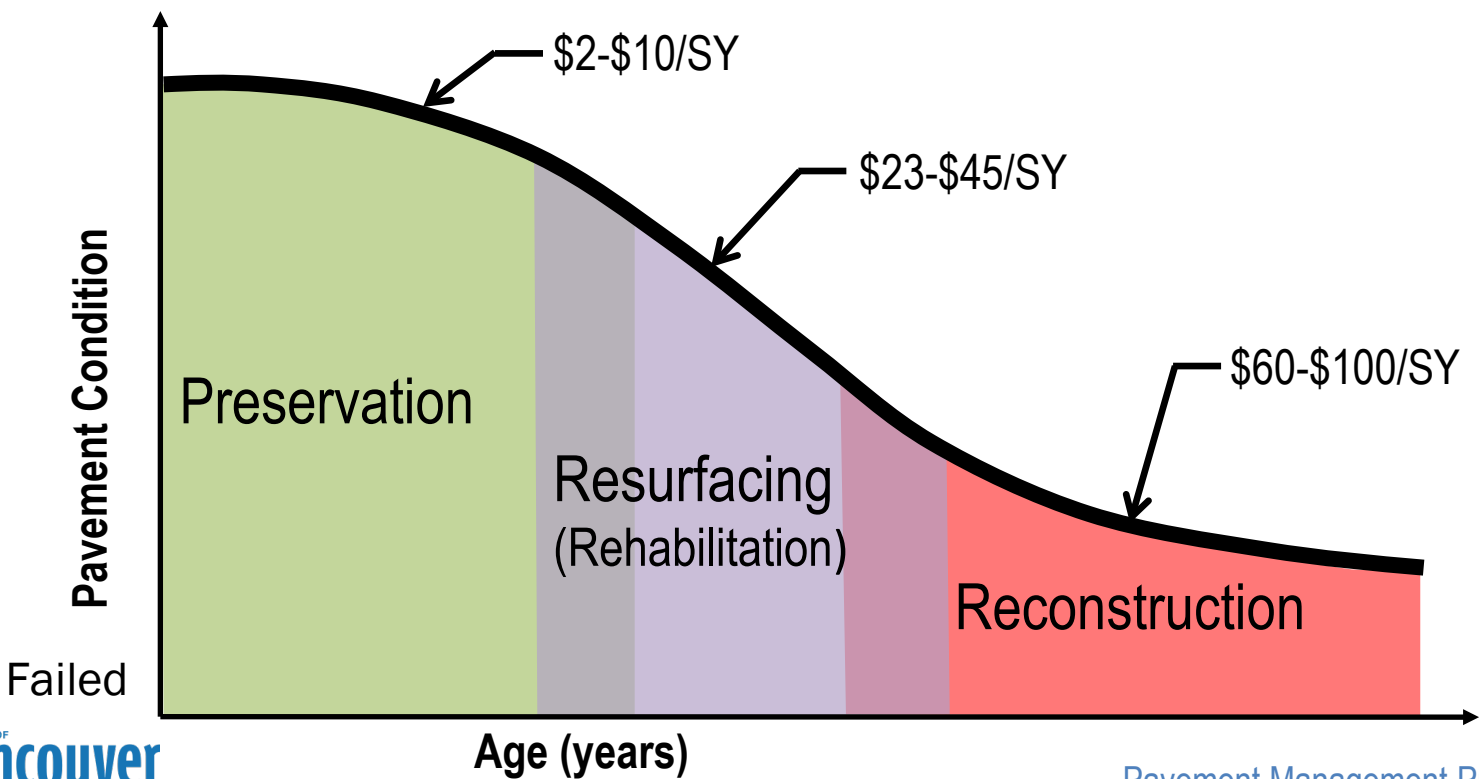
*\*PCI: Pavement Condition Index*



# Pavement Conditions (2016 – 2021)



# Pavement Life and Treatment Curve





# Pavement Management Program Budget

## Funding Sources

- Gas Tax
- REET Allocation
- General Fund
- Street Funding Strategy
- Transportation Benefit District

## Current Budget

- \$12.9M Total in 2022
- ~ \$10M - \$11M for Construction

# Types of Pavement Management Treatments

- Crack Sealing
- Slurry Sealing
- Microsurfacing
- Asphalt Rubber Chip Sealing
- Cape Sealing
- Resurfacing and Rehabilitation



# Pavement Management Treatment Selection Criteria

- Pavement Condition Index (PCI) and type of defects on each street
- Balance Preservation with Resurfacing
- Keep streets in good condition
- Keep streets from needing a more expensive pavement treatment in the future
- Priority on arterial streets but don't neglect residential streets
- Time since last street work completed
- Group streets together with similar treatments
- Spread work throughout the entire City
- Needed ADA curb ramp upgrades
- Consider equity impacts when having to decide between similar streets

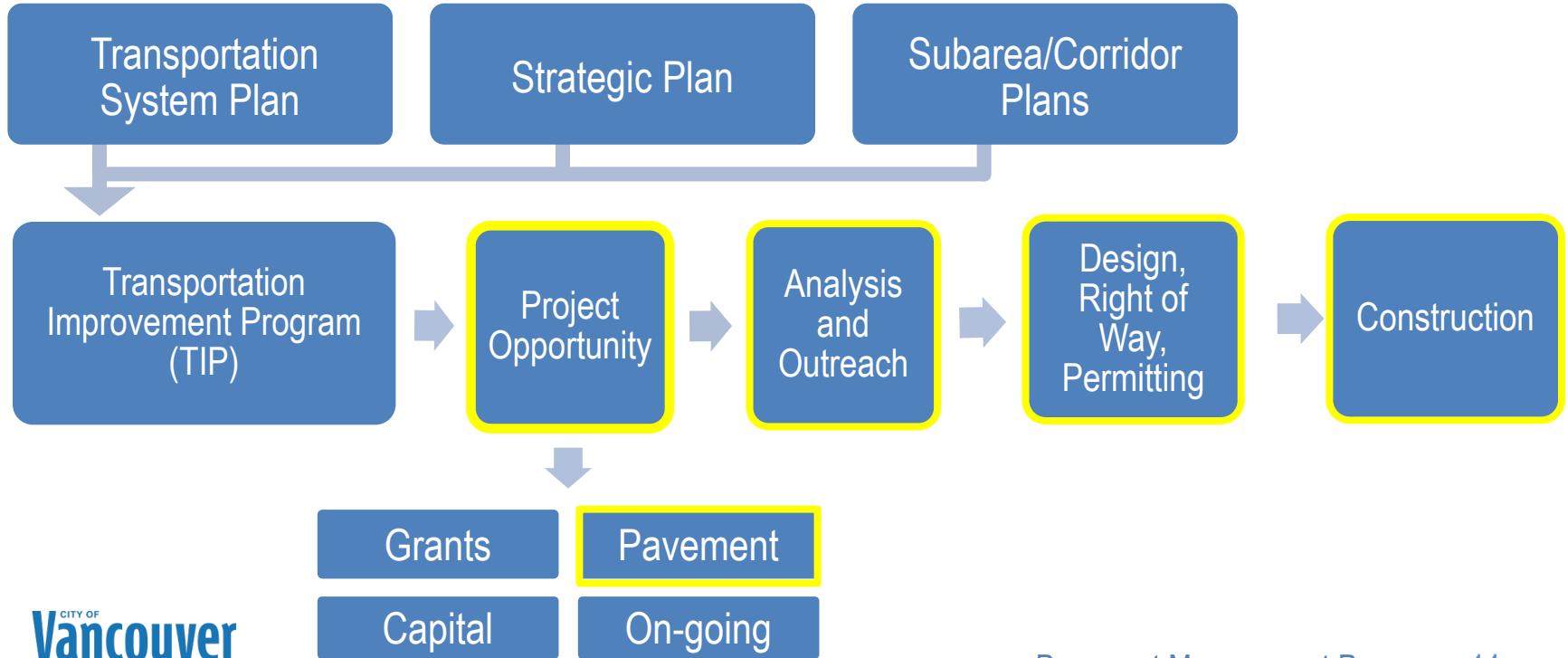
# Pavement Management Treatment Selection Process

- Generate initial street candidate list
- Inventory ADA curb ramps and update estimated cost
- Coordinate with Transportation planners, other departments, other agencies, and private utilities
- Grants
- Revise plan as needed to available funding
- Maintain 3 years of future street plans

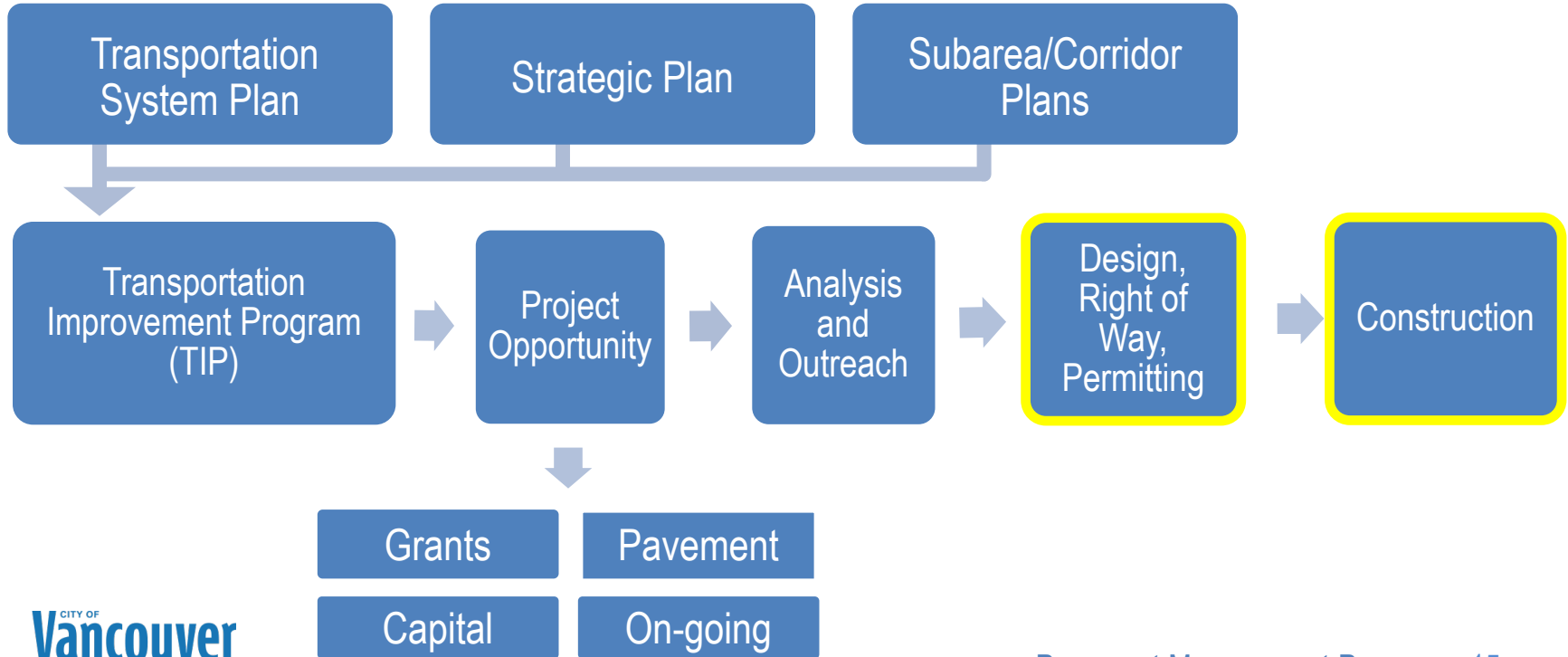
# Coordination and Collaboration

- Opportunity to improve striping for traffic flow, bikes, and pedestrians (safety and mobility)
- Opportunity to implement Council endorsed Complete Streets projects
- Opportunity to implement Neighborhood Traffic Safety Alliance (NTSA) projects
- Teaming with utility projects and other agencies

# Transportation Project Pipeline

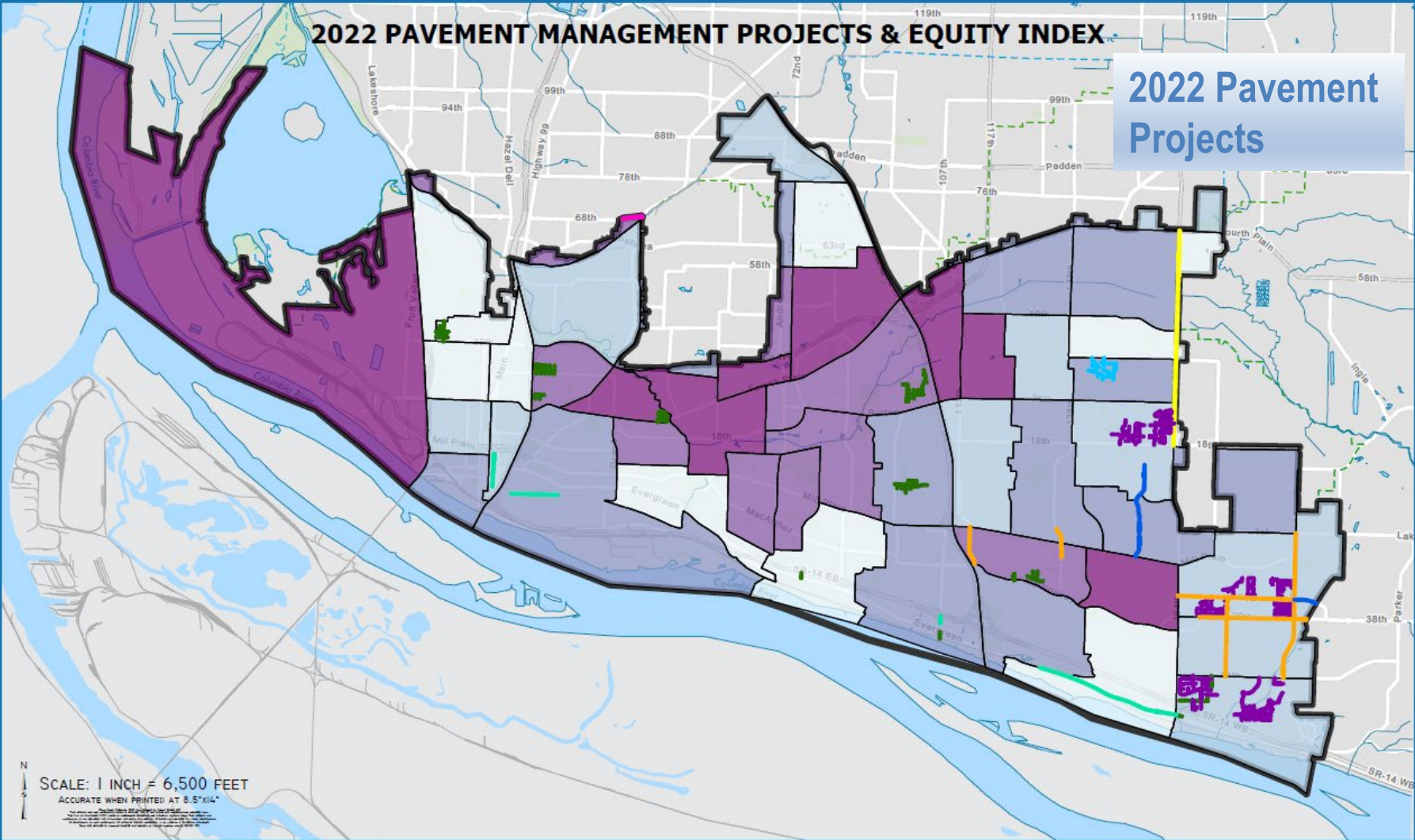


# Transportation Project Pipeline – 2022 Pavement Program



# 2022 PAVEMENT MANAGEMENT PROJECTS & EQUITY INDEX

## 2022 Pavement Projects



SCALE: 1 INCH = 6,500 FEET  
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# 2022 Pavement Projects

- Broadway Phase 2: W 6<sup>th</sup> St. to W 13<sup>th</sup> St.
- Rose Village: Street Rehabilitation
- Oakbrook: Street Rehabilitation
- NE 162<sup>nd</sup> Avenue and SE 192<sup>nd</sup> Avenue
- SE 15<sup>th</sup> Street, SE 20<sup>th</sup> Street, and SE 176<sup>th</sup> Avenue
- NE 155<sup>th</sup> Avenue/Countryside (including NTSA implementation)
- Preservation work east of I-205

# 2022 Pavement Management Program

- 9 contracts (3 curb ramp, 3 preservation, and 3 resurfacing) totaling ~\$11M
- 215 new or upgrading curb ramps
- 89 lane miles of preservation
- 19.4 lane miles of resurfacing
- 23 city neighborhoods



# 2022 Pavement Management Program - Projects

## Council Approved Complete Streets Projects

- Planning is in progress on several – will implement in '23 & '24

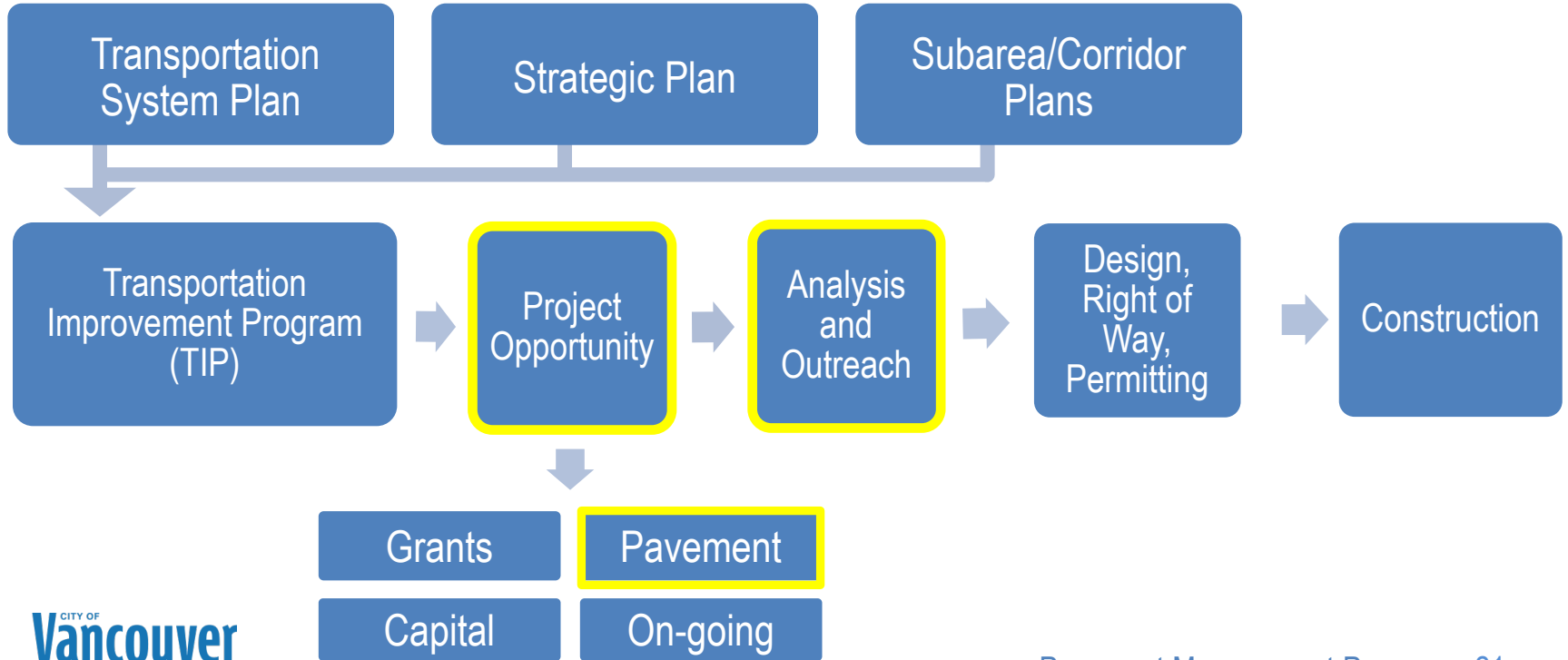
## Opportunity Streets

- 155<sup>th</sup> Ave/Countryside: implement NTSA project
- SE 15<sup>th</sup> Street: SE 164<sup>th</sup> Ave. to SE 192<sup>nd</sup> Ave
- SE 20<sup>th</sup> Street: SE 172<sup>nd</sup> Ave to SE 192<sup>nd</sup> Ave
- SE 176<sup>th</sup> Avenue: SE 34<sup>th</sup> St to SE 15<sup>th</sup> St

# 2022 Pavement Management Program - Schedule

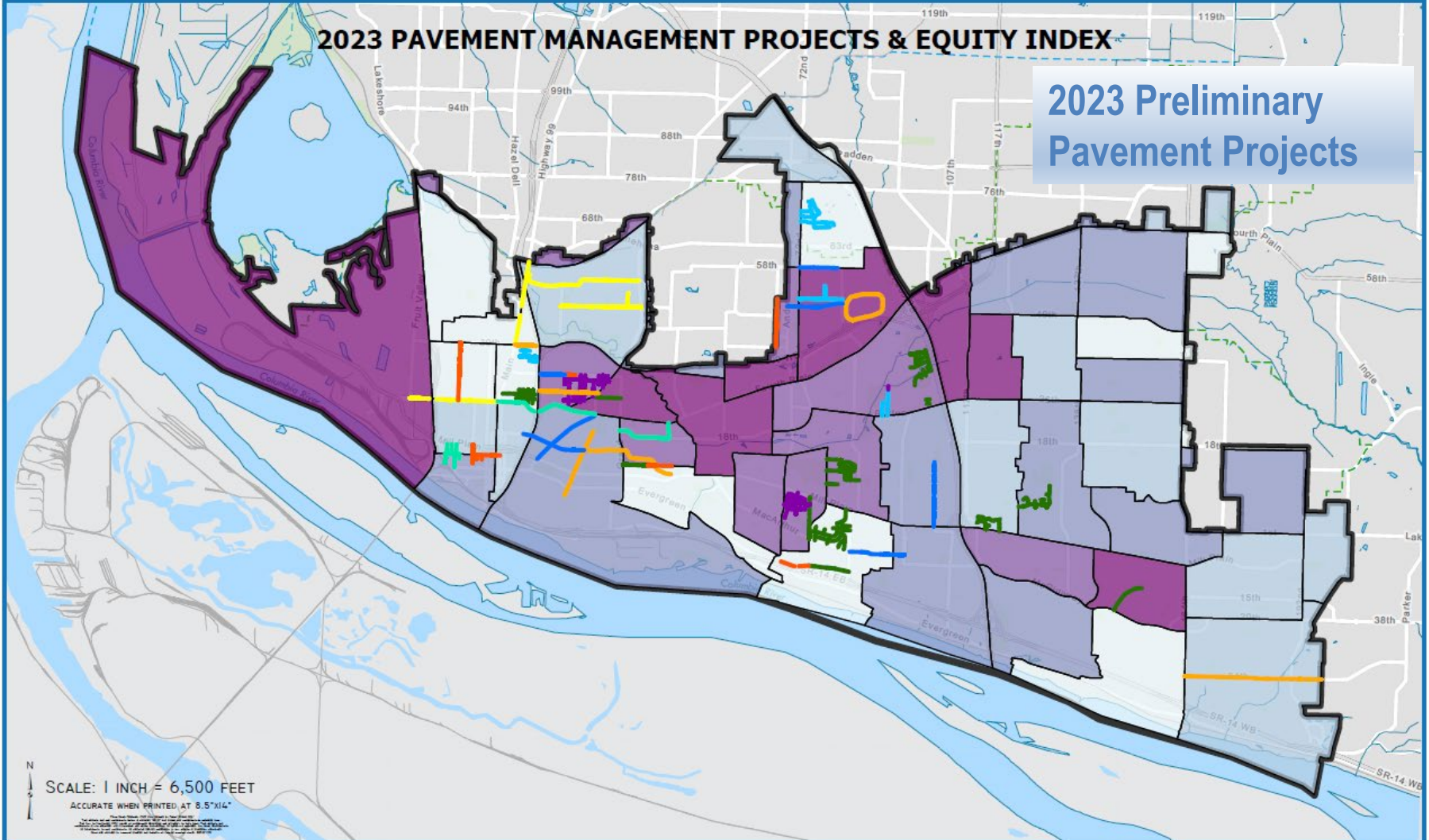
- Broadway Improvements – February to June
- Curb Ramps – March to early July
- Pavement Repairs and Surface Prep – March to July
- Preservation Work – July and August
- Paving and Rehabilitation Work – July to September
- Re-striping of Streets – August and September

# Transportation Project Pipeline – 2023-2024 Projects



# 2023 PAVEMENT MANAGEMENT PROJECTS & EQUITY INDEX

## 2023 Preliminary Pavement Projects



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# 2023 Preliminary Pavement Projects

- 4<sup>th</sup> Plain Blvd: Main St. to Ft. Vancouver Way
- Ft. Vancouver Way: Mill Plain Blvd. to 4<sup>th</sup> Plain Blvd.
- McLoughlin Blvd: F St. to Brandt Rd.
- Vancouver Heights and Oakbrook: Street Rehabilitation
- SE 34<sup>th</sup> Street: SE 164<sup>th</sup> Ave. to SE Payne Rd.
- NE 54<sup>th</sup> Street and NE 49<sup>th</sup> Street
- Preservation work west of I-205

# 2023 Preliminary Pavement Projects

Council Approved and Funded Complete Streets Projects slated to be implemented in 2023:

- 4<sup>th</sup> Plain Blvd: Main St. to Ft. Vancouver Way
- Ft. Vancouver Way: Mill Plain Blvd. to 4<sup>th</sup> Plain Blvd.
- McLoughlin Blvd: F St. to Brandt Rd.
- SE 34<sup>th</sup> Street: SE 164<sup>th</sup> Ave. to SE 192<sup>nd</sup> Ave.



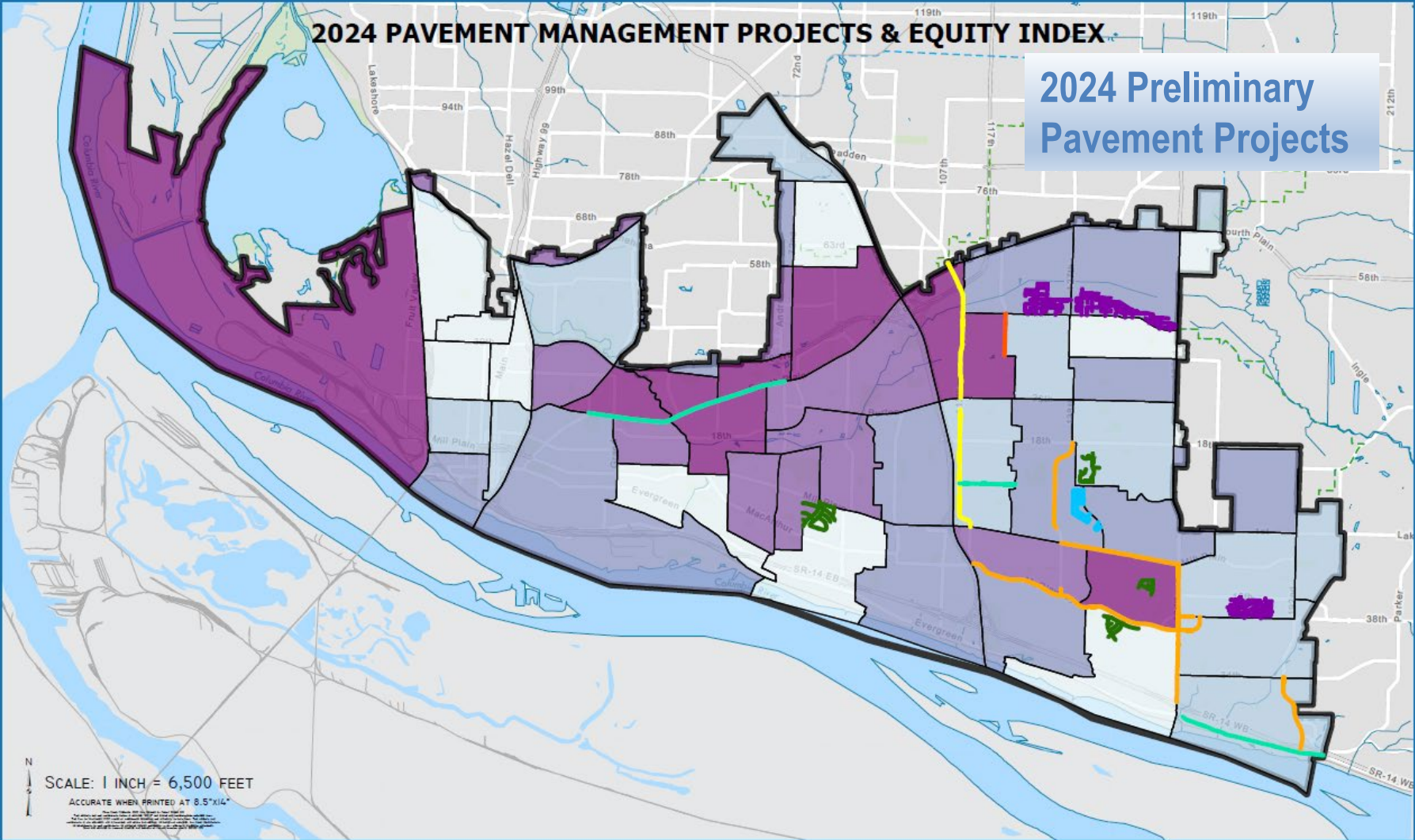
# 2023 Preliminary Pavement Projects

Opportunity Streets slated to receive pavement treatment in 2023:

- Kauffman: 4<sup>th</sup> Plain Blvd. to W 39<sup>th</sup> St.
- E 29<sup>th</sup> Street: I-5 to St. Johns Blvd.
- Ross/NE 54<sup>th</sup> Street: Hwy 99 to St. James Blvd.
- NE 49<sup>th</sup> Street: NE 15<sup>th</sup> Ave. to St. James Blvd. (NTSA)
- NE 104<sup>th</sup> Avenue: Mill Plain to NE 14<sup>th</sup> Street

# 2024 PAVEMENT MANAGEMENT PROJECTS & EQUITY INDEX

2024 Preliminary Pavement Projects



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# 2024 Preliminary Pavement Projects

- 4<sup>th</sup> Plain Blvd: Ft. Vancouver Way to Andresen Road
- NE 112<sup>th</sup> Avenue: Mill Plain Blvd. to 4<sup>th</sup> Plain Blvd.
- SE McGillivray Blvd: Chkalov Dr. to SE 164<sup>th</sup> Ave.
- SE 164<sup>th</sup> Ave, SE Mill Plain, SE 192<sup>nd</sup> Ave
- Vancouver Heights and Cascade: Street Rehabilitation
- Evergreen Highway: SE 164<sup>th</sup> Ave. to City limits
- Preservation work east of I-205

# 2024 Preliminary Pavement Projects

## Council Approved Complete Streets Projects:

- 4<sup>th</sup> Plain Blvd: Ft. Vancouver Way to Andresen Road
- NE 112<sup>th</sup> Avenue: Mill Plain Blvd. to 4<sup>th</sup> Plain Blvd.
- SE McGillivray Blvd: Chkalov Dr. to SE 164<sup>th</sup> Ave.

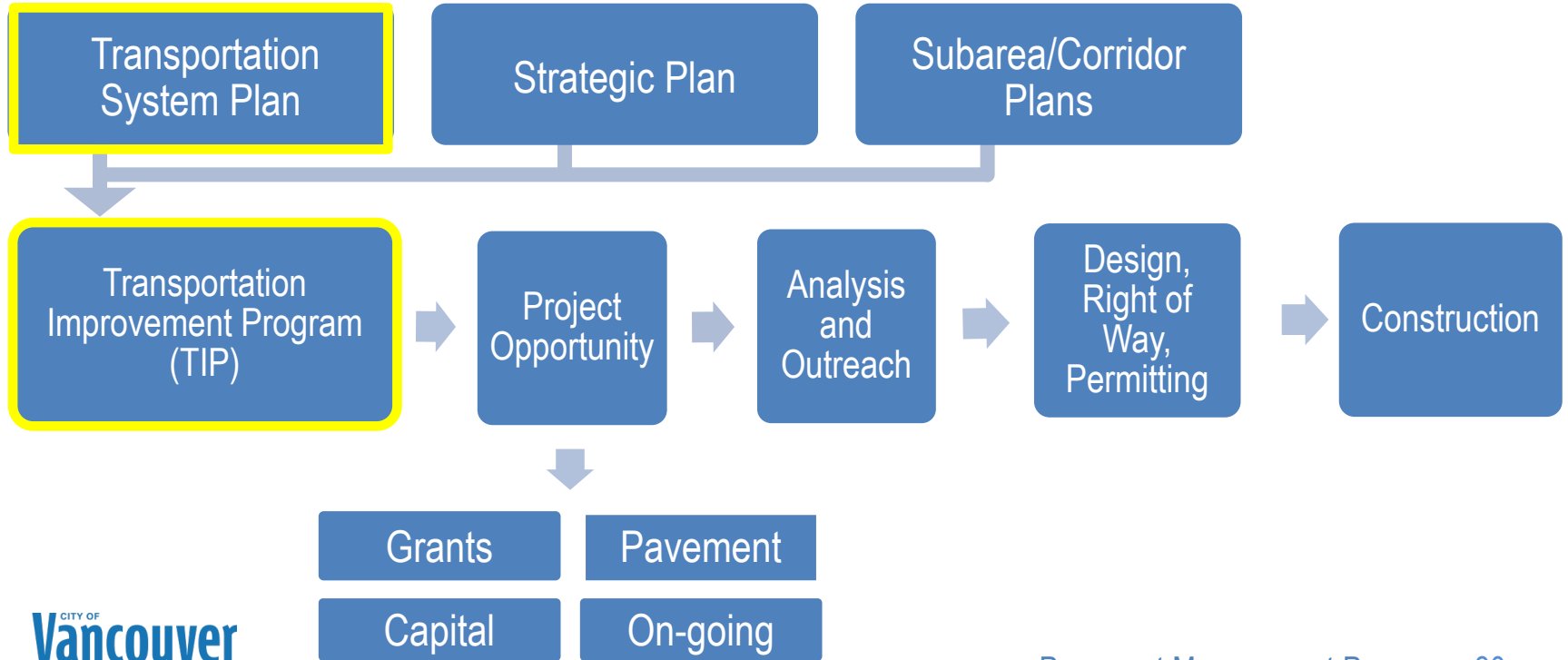
## Opportunity Streets:

- NE 9<sup>th</sup> Street: NE 112<sup>th</sup> Ave. to NE 125<sup>th</sup> Ave.
- NE 136<sup>th</sup> Avenue: SE 4<sup>th</sup> St. to NE 18<sup>th</sup> St.

# 2025 Paving Program and Beyond

- Discussion on Complete Streets projects recommended for 2023-2024 budget (implemented with 2025 & 2026 paving projects)
- Incorporation of elements from the Transportation System Plan update
- Annual updates to the Transportation Mobility Committee

# Transportation Project Pipeline – 2025 and Beyond



# Questions and Discussion

Ryan Miles, Street Operations Program Manager, Public Works  
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[www.cityofvancouver.us/publicworks/page/pavement-management](http://www.cityofvancouver.us/publicworks/page/pavement-management)

# Pavement Conditions





# Crack Sealing



# Slurry Sealing



# Microsurfacing



# Asphalt Rubber Chip Sealing



# Cape Sealing



# Resurfacing and Rehabilitation



# Treatment Costs

- |                     |                    |                     |
|---------------------|--------------------|---------------------|
| • Crack Sealing     | \$0.6 to \$1/lf.   | Doesn't trigger ADA |
| • Slurry Sealing    | \$1.6 to \$2.5/sy. | Doesn't trigger ADA |
| • Microsurfacing    | \$2.25 to 4.25/sy  | Triggers ADA        |
| • AR Chip Seal      | \$5.5 to 7.5/sy.   | Doesn't trigger ADA |
| • Cape Sealing      | \$7 to 11/sy       | Triggers ADA        |
| • Resurfacing/Rehab | \$25 to 45/sy      | Triggers ADA        |