INFORMATIONAL MEMORANDUM

TO: **Transportation and Infrastructure Committee**
FROM: **Hari Ponnekanti, Interim Public Works Director**
BY: **Cyndy Knighton, Senior Program Manager**
Scott Bates, Project Manager
CC: **Mayor Ekberg**
DATE: **October 2, 2020**
SUBJECT: **Pavement Management Program**
2020 Analysis Report

ISSUE

Discussion on the new 2020 Pavement Management Analysis Report including analysis of Tukwila's road system rating and budgetary impacts for the Annual Overlay & Repair Program.

BACKGROUND

Tukwila owns, operates, and maintains over 200 lane miles of paved asphalt roadways. Public Works monitors the condition of each roadway segment for deterioration and distress signs such as cracking, rutting, surface wear, humps, bumps, and sags. KPG was retained to design overlay projects for the 2019 and 2020 construction years. Included in the contract was a task to complete a pavement condition assessment and analysis update for all 80.5 centerline miles (200+ lane miles) of City-owned asphalt roadways. The last time an assessment of the entire City was completed was 2013. The Council adopted funds for updating the Pavement Management System in the 2019-2020 budget.

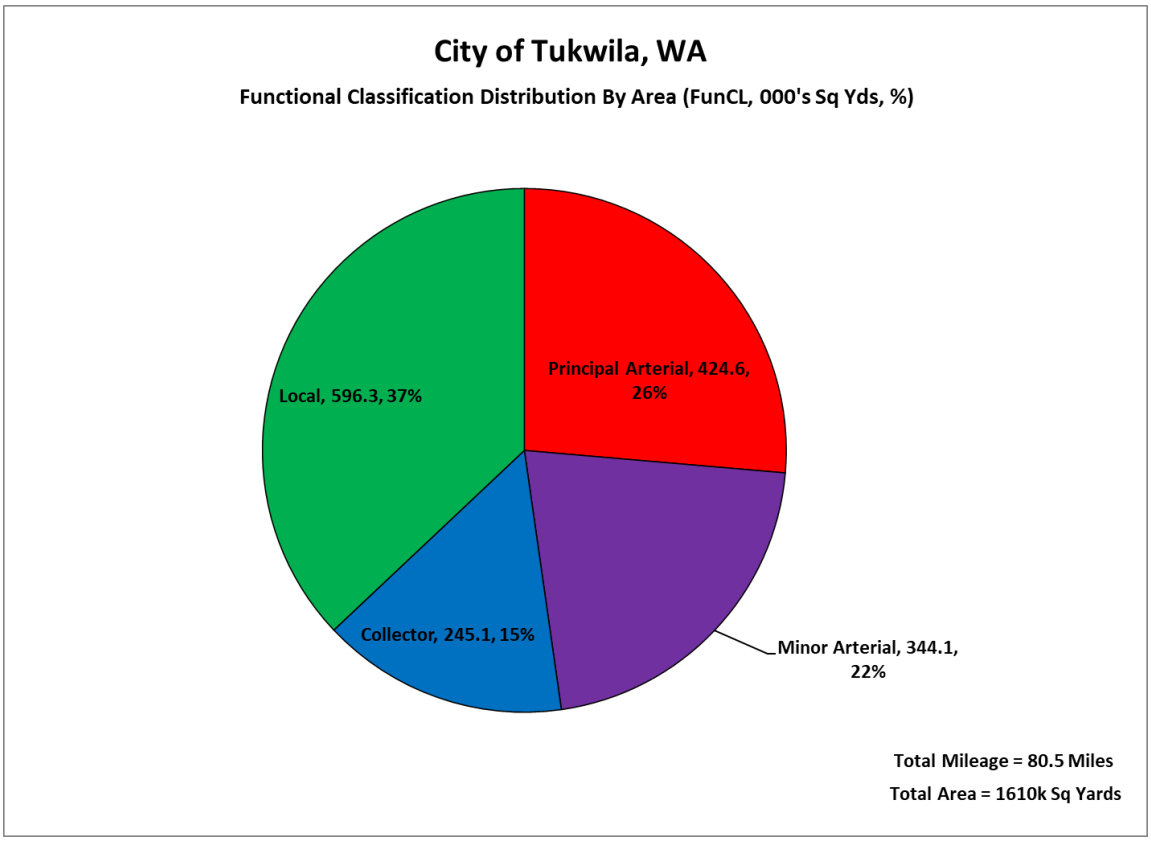
ANALYSIS

In general, the report shows that the City's road network is in good condition with an average Pavement Condition Index (PCI) of 66 and a backlog (roads rated below a PCI of 40) of only 1.3% of the overall network. The average PCI for Tukwila streets is slightly above the national average of 60-65. The national average of backlog is 12%, putting Tukwila well below that point. However, the number of Tukwila streets rated as Excellent is only 6% which is lower than the recommended 15%. This shows Tukwila's ongoing dedication to maintaining healthy road conditions.

The pavement ratings range from excellent (a PCI of 85-100), which would be a new roadway like 42nd Ave S or 53rd Ave S to Good (a PCI of 60-70) such as S 124th St near TCC , to Poor (PCI 25-40) such as Minkler Blvd, east of Andover Park East.

Roads are also rated by functional class from Principal Arterial (i.e. Southcenter Boulevard), Minor Arterial (i.e. Andover Park East), Collector (i.e. Macadam Rd S), and Local (i.e. Fort Dent Way). Functional classification of Tukwila roadways is generally distributed as shown below.

Classification	Percent of Network
Principal	5-10%
Minor	10-20%
Collector	5-10%
Local Access	60-80%



Tukwila Pavement Management Inventory by Functional Class

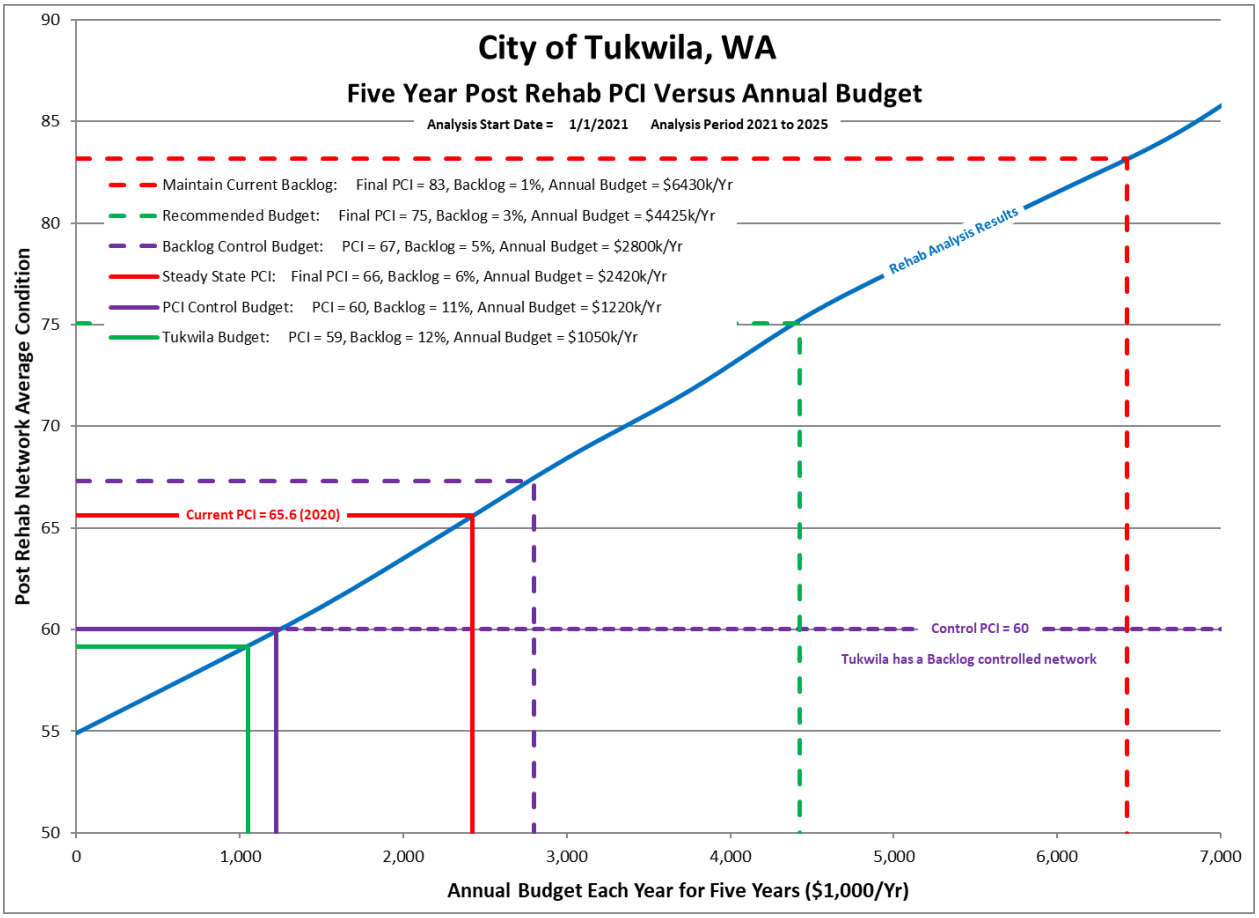
	PCI	Principal Arterial	Minor Arterial	Collector	Local	National Average
Average		**65**	**67**	**63**	**65**	**60**
Excellent	85-100	4%	10%	3%	6%	15%
Very Good	70-85	36%	34%	23%	32%	
Good	60-70	27%	24%	32%	26%	
Fair	50-60	21%	24%	37%	19%	
Marginal	40-50	11%	8%	5%	14%	
Poor	25-40	1%	0%	0%	3%	15%
Very Poor	0-25	0	0	0	0	

Funding of roadway rehabilitation is an exercise in identifying the balance between available funding and the desired level of service. There are no hard rules for what the definitive level of funding should be. There are currently no dedicated revenues for roadway rehabilitation and therefore these have become a General Fund expense in the 104 Fund. Tukwila's investment in the road network is estimated to have a replacement value of more than $36M.

The Pavement Management Analysis Report makes the following key recommendations:

- Maintain an average PCI at 60 or better with a backlog of less than 15%
- Routinely resurvey all streets every few years to update conditions and prioritize streets
- Annually review priority overlay streets and costs of overlay to keep the pavement management system current
- Update the pavement management system with any new streets
- Continue funding routine maintenance activities outside of the overlay program costs.

The consultant provided different five-year funding scenarios and the possible impact on PCI and backlog based on these recommendations. The funding options ranged from $1.05 million per year to $6.5 million per year. A $1.22 million investment over five years will keep the City near a PCI of 60 and a backlog of 12%.



Five-year Funding Options and impact on PCI and Backlog

Annual Funding ($M)	PCI	Backlog
$1.050	59	12%
$1.220	60	11%
$2.420	66	1.30%
$2.800	67	5%
$4.425	75	3%
$6.430	83	1%

The 2019-2020 Adopted CIP included $1.05 million per year for the construction budget specifically in the Annual Overlay and Repair Program. Due to the impacts of COVID-19, the City reduced the overlay construction budget to $300,000 in 2020. There are still $800,000 of estimated projects already designed, but not contracted.

In preparing the 2021-2022 Budget, the City looked at the following options.

Option 1: No funding for overlay for two years and deferring all work for two years.
This would most likely increase costs in later years and increase the backlog.

Option 2: Construct the remaining 2020 designed paving projects in 2021 and 2022. Approximately $400k per year for two years. This takes advantage of the current project designs and minimizes the costs for two years.
This is estimated to decrease our PCI and increase our backlog, which would need to be made up in future years.

Option 3: Fund the program with $1.22 M for 2021 and 2022, then increase this amount in future years beginning in 2023.
This scenario would be most likely to meet the recommendations of keeping PCI at 60% and keeping our backlog below 15%.

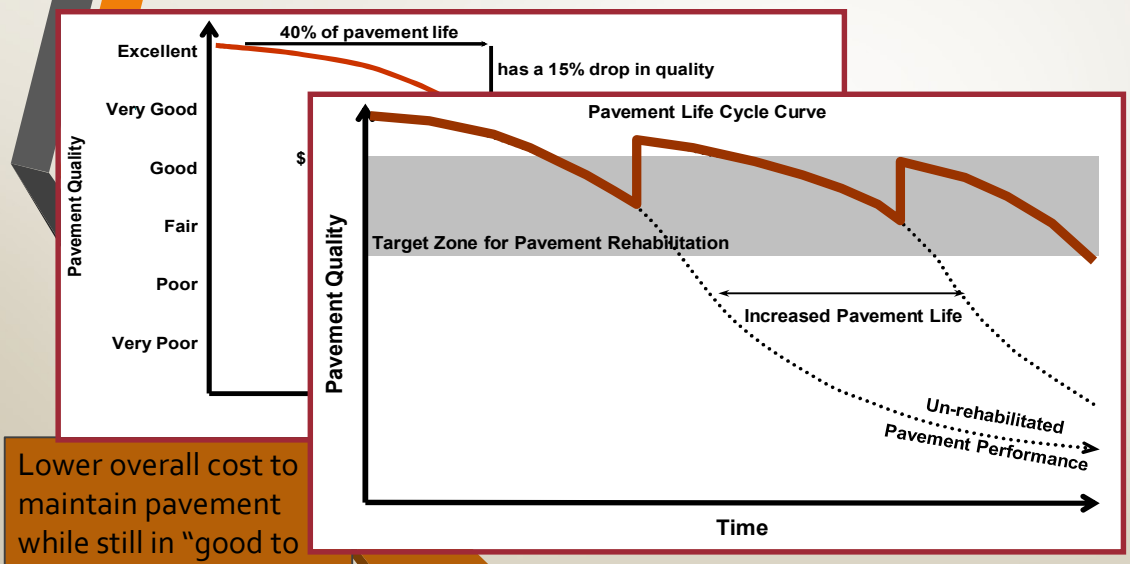
RECOMMENDATION

Accept the Pavement Management Analysis Report recommendations and consider the proposed funding level of $1.4 million in 2021 and 2022 for the Annual Overlay and Repair Program. Committee option to forward this presentation to the Committee of the Whole.

ATTACHMENTS

- PowerPoint Presentation
- Select graphics from Report
- Pavement Management Analysis Full Report, August 2020

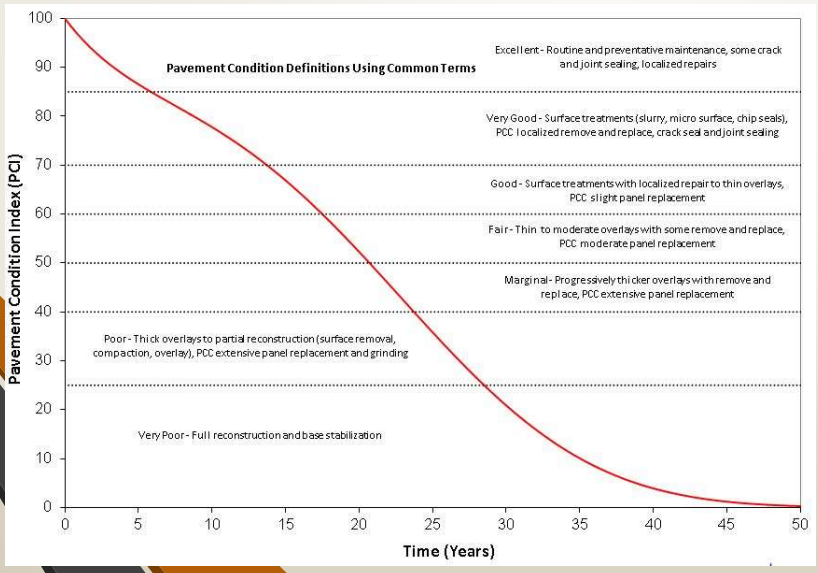
Why do Pavement Management?



Lower overall cost to maintain pavement while still in "good to fair" condition.

1

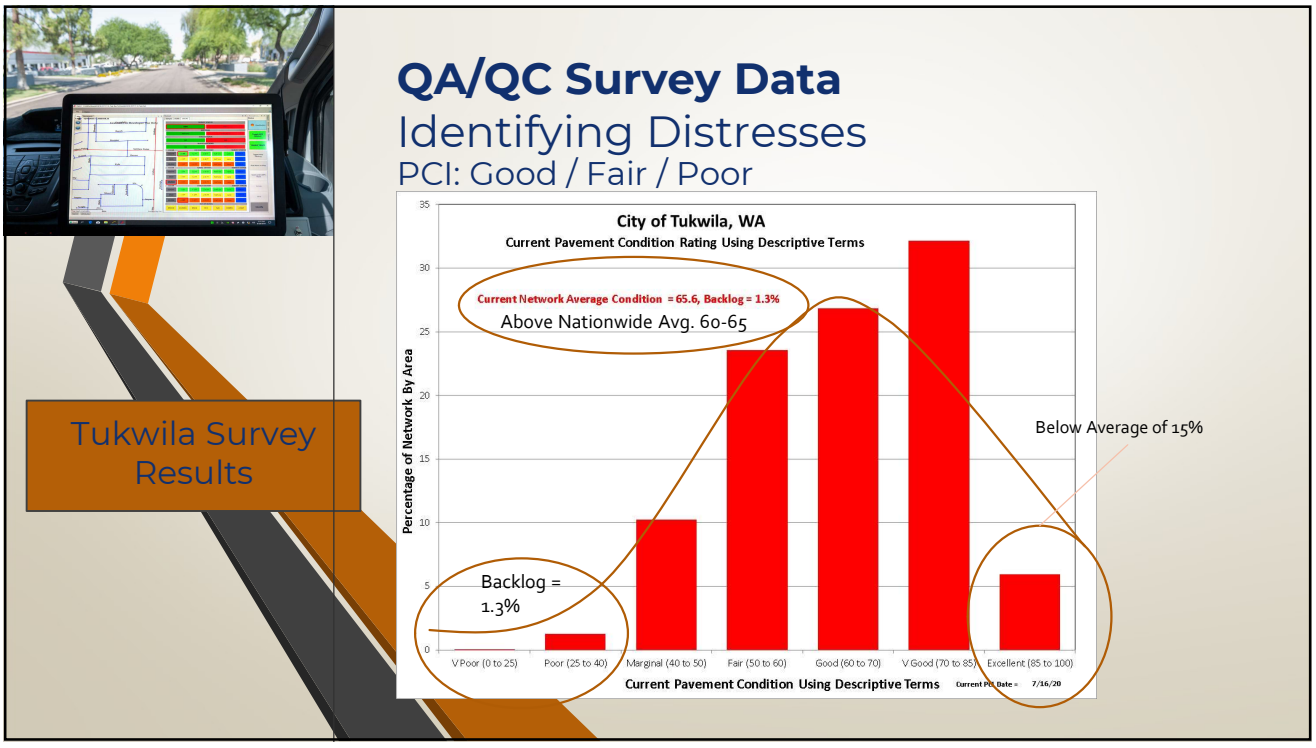
Understanding the Pavement Condition Index



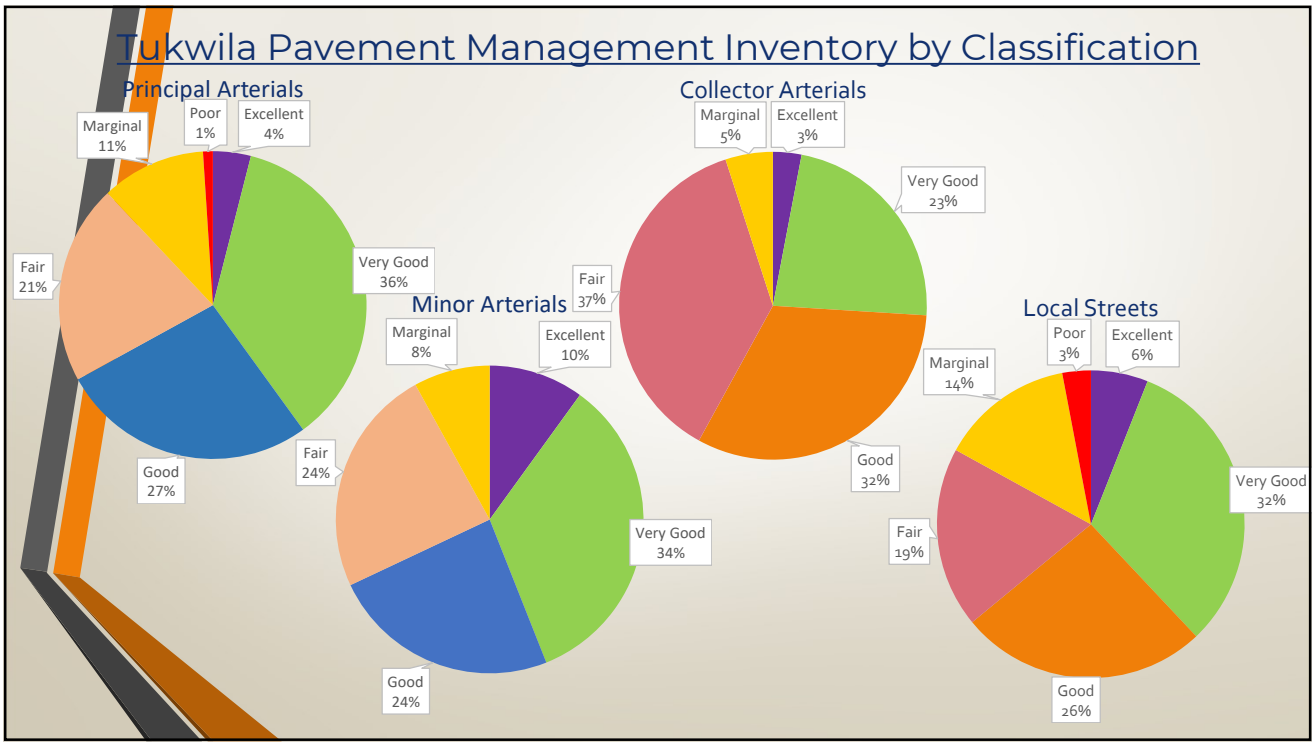
2


DATA COLLECTION
SURVEY PROCESS
☑ GIS Cleanup + Inventory
☑ Data Collection
☑ QA/QC Survey Data
☑ Analysis + Project Planning
Condition Focuses On:
Roughness
Wheel Path Rutting
Alligator Cracking
Longitudinal Cracking
Transverse Cracking
Distortions
Bleeding
Weathering/Raveling
Patching & Potholes
Divided Slabs
Corner Breaks
Faulting
Scaling
Polished Aggregate

3


QA/QC Survey Data
Identifying Distresses
PCI: Good / Fair / Poor
Tukwila Survey Results
City of Tukwila, WA
Current Pavement Condition Rating Using Descriptive Terms
Current Network Average Condition = 65.6, Backlog = 1.3%
Above Nationwide Avg. 60-65
Below Average of 15%
Backlog = 1.3%
Percentage of Network By Area
V Poor (0 to 25)
Poor (25 to 40)
Marginal (40 to 50)
Fair (50 to 60)
Good (60 to 70)
V Good (70 to 85)
Excellent (85 to 100)
Current Pavement Condition Using Descriptive Terms

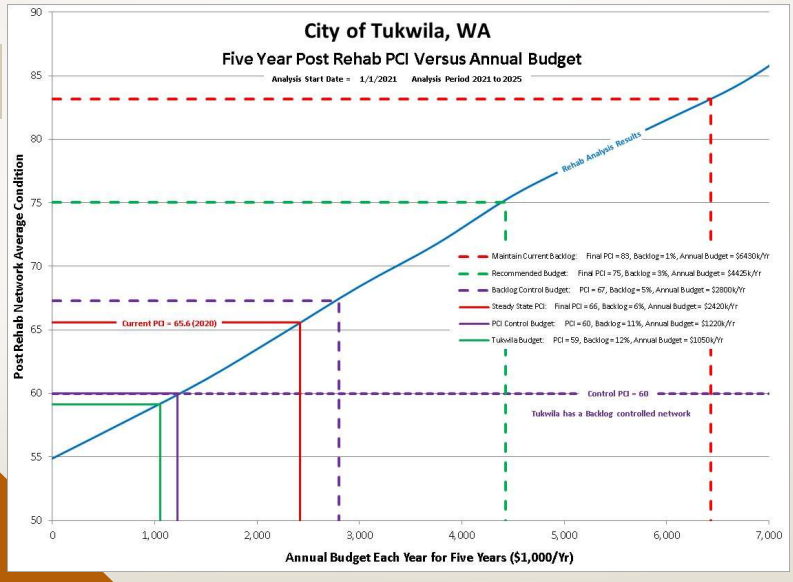
4



5

Additional Funding Sources are Needed

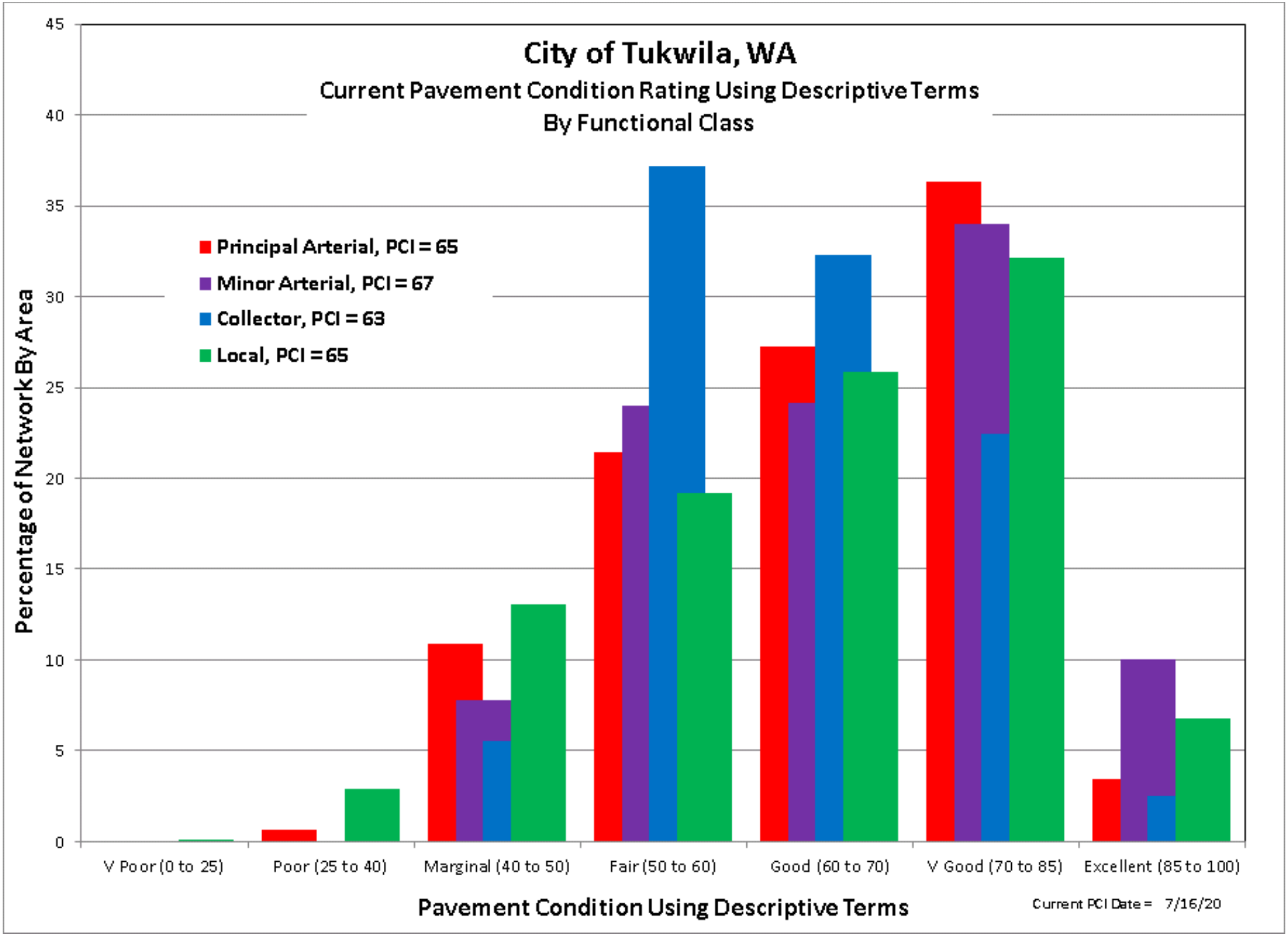
Maintain PCI at 60 = $1.2M
Maintain Current PCI = $2.4M

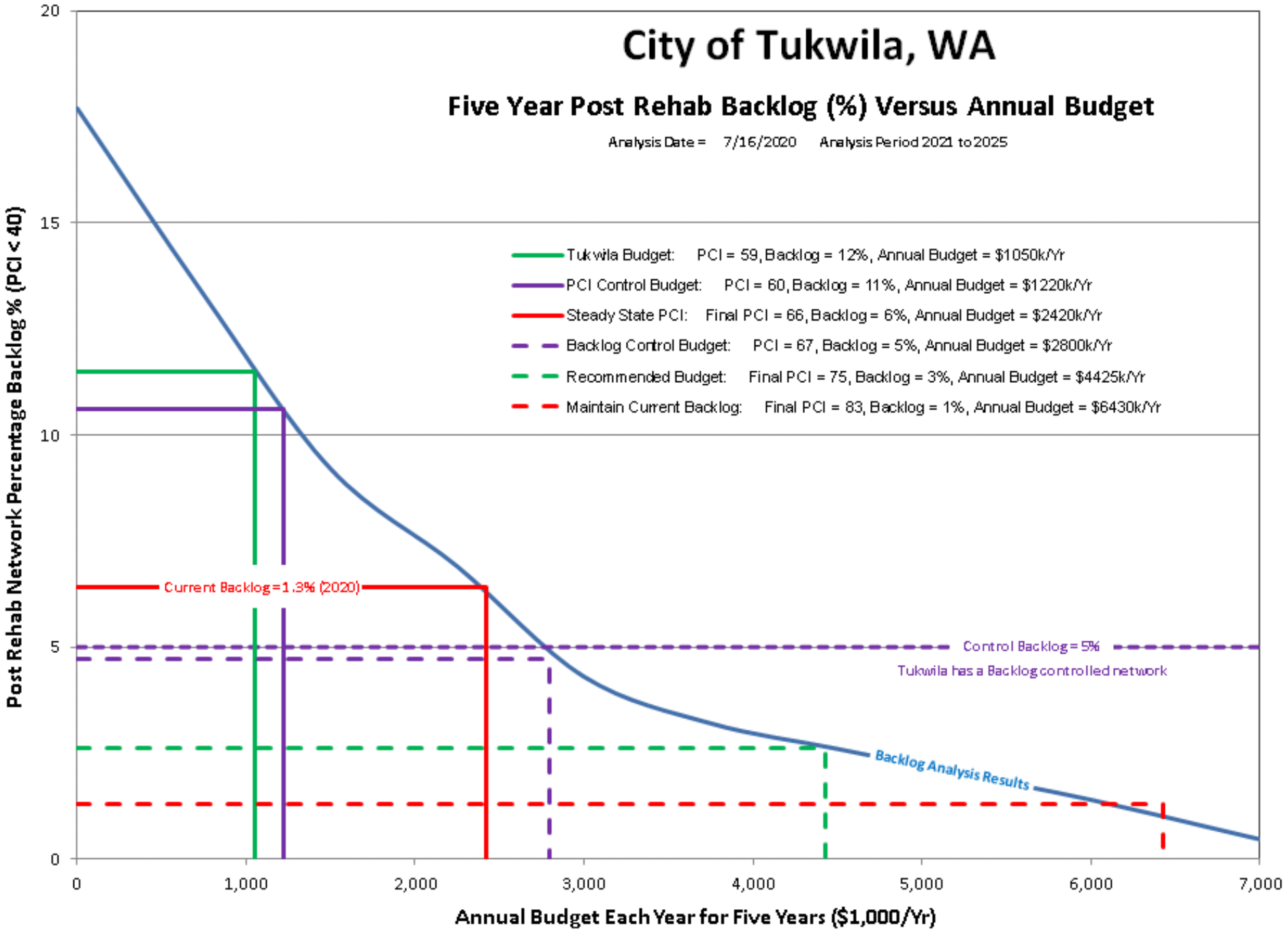


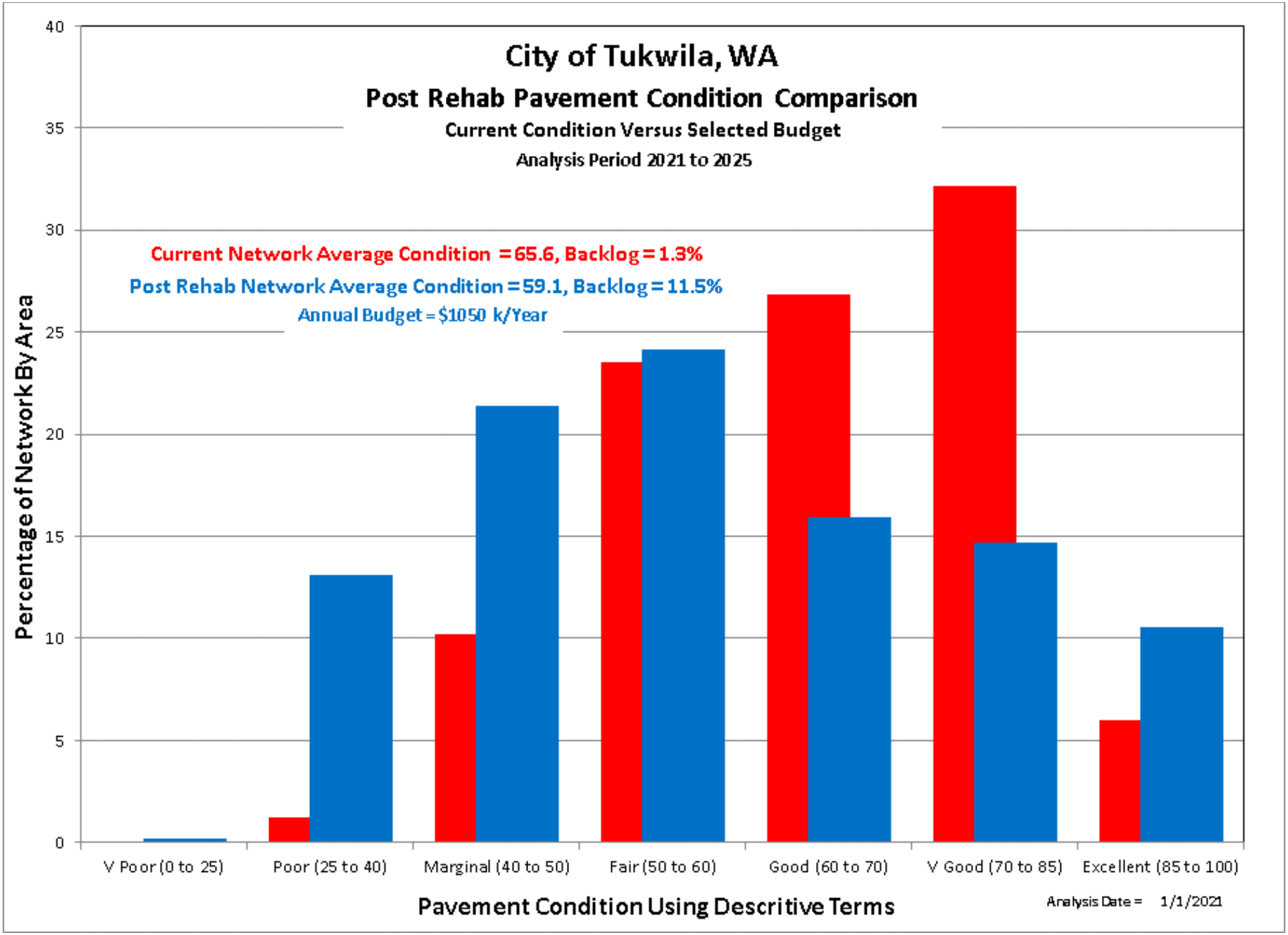
Potential Funding Sources:

- Transportation Benefit District
- Voter approved levy
- Council-directed dedicated revenue source

6


City of Tukwila, WA
Current Pavement Condition Rating Using Descriptive Terms
By Functional Class
Principal Arterial, PCI = 65
Minor Arterial, PCI = 67
Collector, PCI = 63
Local, PCI = 65
Percentage of Network By Area
45
40
35
30
25
20
15
10
5
0
V Poor (0 to 25)
Poor (25 to 40)
Marginal (40 to 50)
Fair (50 to 60)
Good (60 to 70)
V Good (70 to 85)
Excellent (85 to 100)
Pavement Condition Using Descriptive Terms
Current PCI Date = 7/16/20


City of Tukwila, WA
Five Year Post Rehab Backlog (%) Versus Annual Budget
Analysis Date = 7/16/2020 Analysis Period 2021 to 2025
Tukwila Budget: PCI = 59, Backlog = 12%, Annual Budget = $1050k/Yr
PCI Control Budget: PCI = 60, Backlog = 11%, Annual Budget = $1220k/Yr
Steady State PCI: Final PCI = 66, Backlog = 6%, Annual Budget = $2420k/Yr
Backlog Control Budget: PCI = 67, Backlog = 5%, Annual Budget = $2800k/Yr
Recommended Budget: Final PCI = 75, Backlog = 3%, Annual Budget = $4425k/Yr
Maintain Current Backlog: Final PCI = 83, Backlog = 1%, Annual Budget = $6430k/Yr
Current Backlog = 1.3% (2020)
Control Backlog = 5%
Tukwila has a Backlog controlled network
Backlog Analysis Results
Post Rehab Network Percentage Backlog % (PCI < 40)
Annual Budget Each Year for Five Years ($1,000/Yr)
0
5
10
15
20
0
1,000
2,000
3,000
4,000
5,000
6,000
7,000


City of Tukwila, WA
Post Rehab Pavement Condition Comparison
Current Condition Versus Selected Budget
Analysis Period 2021 to 2025
Current Network Average Condition = 65.6, Backlog = 1.3%
Post Rehab Network Average Condition = 59.1, Backlog = 11.5%
Annual Budget = $1050 k/Year
Percentage of Network By Area
40
35
30
25
20
15
10
5
0
V Poor (0 to 25)
Poor (25 to 40)
Marginal (40 to 50)
Fair (50 to 60)
Good (60 to 70)
V Good (70 to 85)
Excellent (85 to 100)
Pavement Condition Using Descritive Terms
Analysis Date = 1/1/2021

Tukwila, WA

Pavement Management Analysis Report

August, 2020

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www.imsanalysis.com

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APPENDED MAPS **Located on Thumb Drive**

Functional Classification by Segment
Pavement Condition Index by Segment
Pavement Condition Rating by Segment Using Descriptive Terms
Assembled Projects
Pavement Condition Rating by Project Using Descriptive Terms
$1.05M/year Rehab Plan Budget
$1.05M/year Post Rehab PCI Map

Abbreviation or Acronym	Definition
$k	Dollars in thousands ($,000)
$M	Dollars in millions
%SP	Percent Spreadability - component of deflection analysis
AC	Asphalt Concrete - asphalt streets, flexible pavements, also know n as ACP
ACP	Asphalt Concrete Pavement - asphalt streets, flexible pavements, also know n as AC
ART	Arterial roadw ay functional classification
ASTM	American Society of Testing Methods
Avg	Average
BCI	Base Curvature Index - component of deflection analysis
Brk	Break
CAL	Coarse Aggregate Loss
CDV	Corrected Deduct Value - part of the ASTM D6433 PCI calculation
COL	Collector roadw ay functional classification
Crk	Crack
DeflCON	Deflection Condition - structural load analysis based on traffic loading and deflection
DMD	Dynamic Maximum Deflection - temperature corrected deflection
Dvdd Slab	Divided Slab
DynaCON	Dynamic Condition - structural layer analysis
ft or FT	Foot
ft2 or FT2	Square foot
FunCL	Functional Classification
FWD	Falling w eight deflectometer
GCI	Gravel Condition Index
GFP	Good - Fair - Poor
GIS	Geographic Information System
GISID	GIS segment identification number
H&V	Horizontal and Vertical
IRI	International Roughness Index
Jt	Joint
L&T	Longitudinal and Transverse
LAD	Load associated distress
LOC	Local roadw ay functional classification - same as RES
LOG	Lip of Gutter
m	Metre or meter
M	Moderate
m2	square metre or square meter
MART	Major arterial roadw ay functional classification
Max	Maximum
MaxDV	Maximum Deduct Value
MCOL	Major collector roadw ay functional classification
mi or Mi	Mile
Min	Minimum
MnART	Minor arterial roadw ay functional classification
MnCOL	Minor collector roadw ay functional classification
MOD	Moderate
NLAD	Non-load associated distress
OCI	Overall condition index, also know n as PCI
Olay	Overlay
PART	Primary arterial roadw ay functional classification
Pavetype	Pavement Type
PCC	Portland Cement Concrete - concrete streets
PCI	Pavement Condition Index - generic term for OCI
R&R	Remove and replace
RART	Rural arterial roadw ay functional classification
PWF	Priority Weighting Factor
Recon	Reconstruction
Rehab	Rehabilitation
RES	Local roadw ay functional classification - same as LOC
RI or RCI	Roughness Index
S	Strong
SART	Secondary arterial roadw ay functional classification
SCI	Surface Curvature Index - componenent of deflection analysis
SDI	Surface Distress Index
SI	Structural Index
STA	Station or chainage
Surf Trtmt	Surface Treatment
TDV	Total Deduct Value
W	Weak

1.0 EXECUTIVE SUMMARY & RECOMMENDATIONS

PROJECT SUMMARY

In 2020 IMS Infrastructure Management Services, LLC (IMS) was contracted by the City of Tukwila to conduct a pavement condition assessment and analysis update on approximately 80.5 centerline miles of City maintained asphalt roadways.

IMS mobilized their Laser Road Surface Tester (RST) to conduct an objective assessment using industry standard pavement distress protocols such as those found in ASTM D6433-11. At that time, the City's network average Pavement Condition Index was found to be a 66 and the City's backlog (roads below a PCI of 40) was at only 1%. *See section 4 for more information*

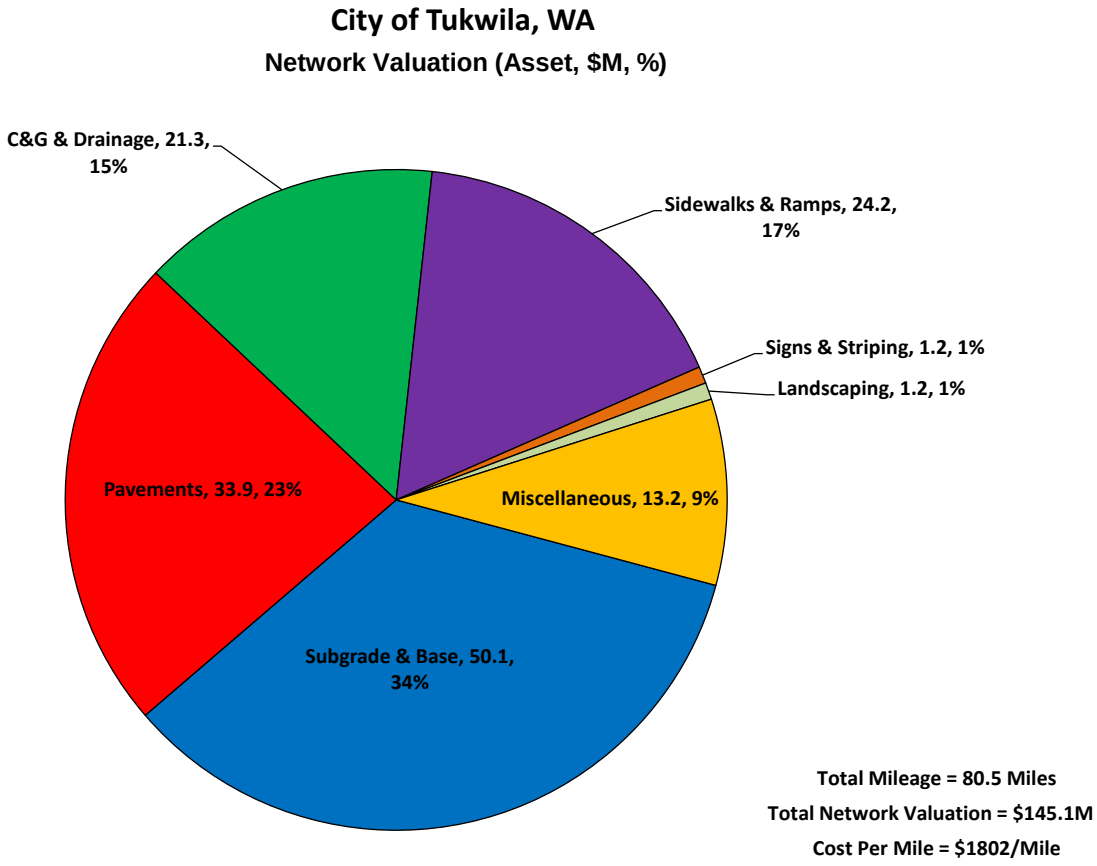

Figure 1- Replacement Value of Roadway Network

As seen in **Figure 1**, Tukwila has just over 80 centerline miles of roadway, encompassing nearly 1.6M square yards of pavement surfacing, which is predominantly asphalt. At an average replacement cost for a typical roadway just over $1.8M per mile, not including the value of the land, the City has over $145M invested in its paved roadway network.

SUMMARY METRICS OF HEALTH

Pavement Condition Index (PCI) – The PCI score is a ranking assessment on the overall health of a pavement segment on a scale of 0 to 100. The network average PCI is a good global indicator of a network's overall health. *(Explained in section 4)*

Percent of Excellent Roads – Roads with a condition category of Excellent are those that score between a PCI of 85 to 100.

Backlog –Backlog is the Very Poor and Poor roads (between a PCI of 0 and 40) that represent a portion of the network in need of extensive rehabilitation such as full and partial reconstruction. Using sound pavement management and finance principles, a very healthy network will have a backlog of 10% or less.

Tukwila met two out of three of the metrics for evaluating the quality of its roadway network.

- ✓ Tukwila's network average pavement condition score is slightly above the national average currently seen by IMS of 60 to 65, with the City's average scoring a 65.6.
- o The number of streets rated Excellent is below the minimum recommended target of 15% at 6%
- ✓ The backlog amount is below the average value of 12% at 1.3%.

BUDGET SCENARIOS

See section 5 for more information

The current annual budget for Tukwila is $1.05M per year dedicated to pavement preservation and rehabilitation. This will grow the backlog to 12% while reducing the average PCI to a 59 over 5 years. Please note this number is an annual budget average across all 5 years of the analysis horizon.

The PCI control budget of $1.22M per year and will maintain the network average PCI at a 60 while increasing the backlog to 11%.

EXECUTIVE SUMMARY CONCLUSION

The Tukwila network has an average PCI of 65.6 and a backlog of 1.3%, with most of the network landing in the Very Good PCI range. With the City's existing budget, the network conditions will degrade into the high 50s PCI range and backlog will continue to grow over time. It is worth noting that the City does have a fair amount of streets approaching the end of their lifespan where overlays can be effective, representing a percentage of the network at the steepest part of their deterioration curves.

2.0 PRINCIPLES OF PAVEMENT MANAGEMENT

2.1 PAVEMENT PRESERVATION

Preservation of existing roads and street systems has become a major activity for all levels of government. Because municipalities must consistently optimize the spending of their budgets, funds that have been designated for pavement must be used as effectively as possible. The best method to obtain the maximum value of available funds is through the use of a pavement management system.

Pavement management is the process of planning, budgeting, designing, evaluating, and rehabilitating a pavement network to provide maximum benefit with available funds.

A pavement management system is a set of tools or methods that assist decision makers in finding optimal strategies for providing and maintaining pavements in a serviceable condition over a given time period. The intent is to identify the optimum level of long-term funding to sustain the network at a predetermined level of service while incorporating local conditions and constraints.

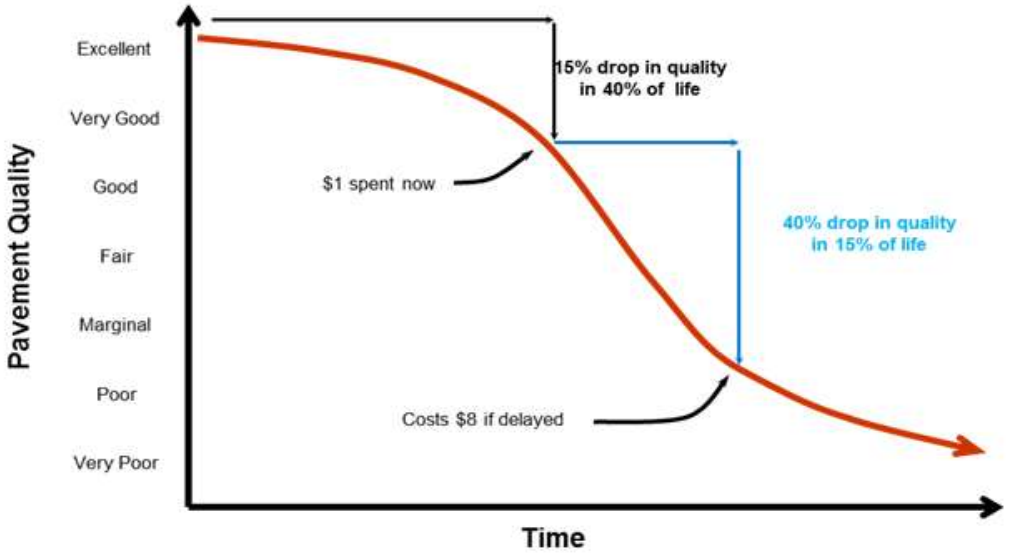

Figure 2 – Pavement Deterioration and Life Cycle Costs

As shown as **Figure 2**, the streets that are repaired while in good condition will cost less over their lifetime than those left to deteriorate to a poor condition. Without an adequate routine pavement maintenance program, streets require more frequent reconstruction, thereby costing millions of extra dollars.

The key to a successful pavement management program is to develop a reasonably accurate performance model of the roadway, and then identify the optimal timing and rehabilitation strategy. The resultant benefit of this exercise is realized by the long term cost savings and increase in pavement quality over time. As illustrated in **Figure 2,** pavements typically deteriorate rapidly once they hit a specific threshold. A $1 investment after 40% lifespan is much more effective than deferring maintenance until heavier overlays or possibly reconstruction are required just a few years later.

Once implemented, an effective pavement information management system can assist agencies in developing long-term rehabilitation programs and budgets. The key is to develop policies and practices that delay the inevitable total reconstruction for as long as practical yet still remain within the target zone for cost effective rehabilitation. That is, as each roadway approaches the steepest part of its deterioration curve, apply a remedy that extends the pavement life, at a minimum cost, thereby avoiding costly heavy overlays and reconstruction. **Figure 3** illustrates the concept of extending pavement life through the application of timely rehabilitations.

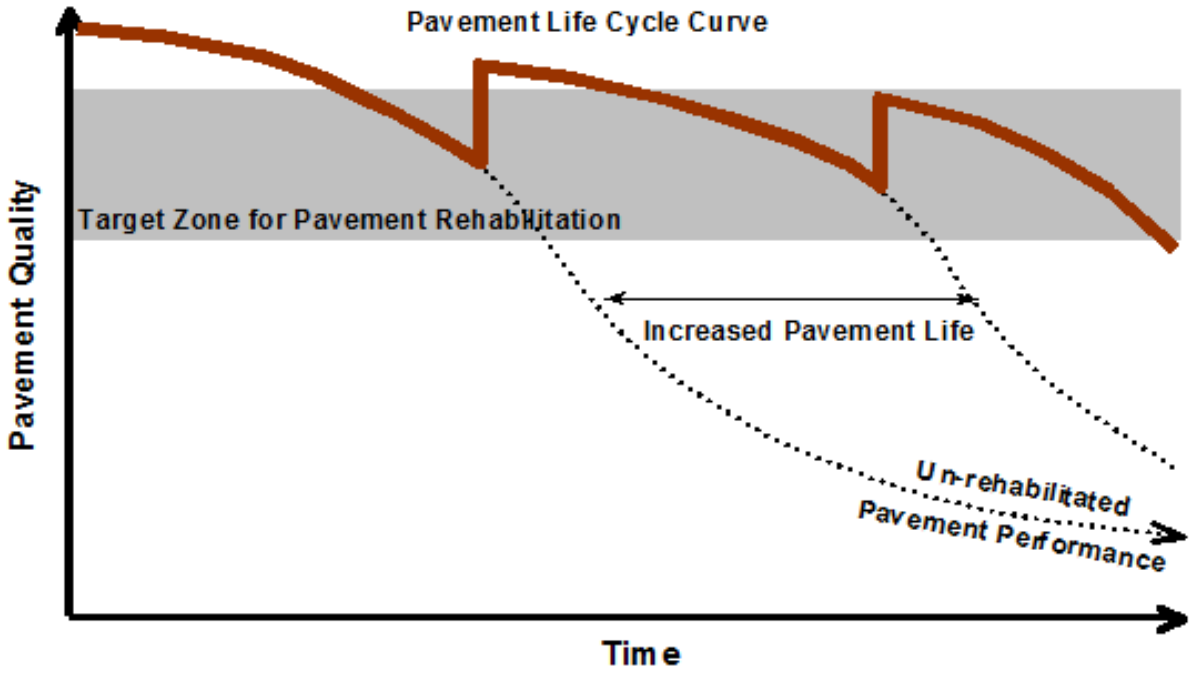

Figure 3 – Pavement Life Cycle Curve

Ideally, the lower limit of the target zone shown in **Figure 3** would have a minimum PCI value in the 60 to 70 range to keep as many streets as possible requiring a thin overlay or less. The upper limit would tend to fall close to the higher end of the Very Good category – that is a pavement condition score approaching 85. Other functions of a pavement management system include assessing the effectiveness of maintenance activities, new technologies, and storing historical data and images.

For Tukwila, a prioritization methodology based on pavement condition, pavement materials, functional class, and strength rating was used to analyze the network condition and develop the proposed 5 year rehabilitation plan.

The analysis methodologies and data collection technologies were based on *ASTM D6433 Standard Practice for Roads and Parking Lots Pavement Condition Index Surveys* (hereinafter ASTM D6433) for assessment of pavement surface condition and the International Roughness Index (IRI) for quantification of pavement roughness on all City streets. These measurements of pavement quality are combined to form an overall 0 to 100 Pavement Condition Index (PCI), with 100 being the best.

2.2 ECONOMIC IMPACTS OF MAINTENANCE & REHABILITATION

The role of the street network as a factor in the City's well-being cannot be overstated. In the simplest of terms, roadways form the economic backbone of a community. They provide the means for goods to be exchanged, commerce to flourish, and commercial enterprises to generate revenue. As such, they are an investment to be maintained.

The overall condition of an agency's infrastructure and transportation network is a key indicator of economic prosperity. Roadway networks, in general, are one of the most important and dynamic sectors in the global economy. They have a strong influence on not only the economic well-being of a community, but a strong impact on quality of life. Well-maintained road networks experience multiple socioeconomic benefits through greater labor market opportunities and decreasing income gap.

As a crucial link between producers and their markets, quality road networks ensure straightforward access to goods and drive global and local economies. Likewise, higher network quality has a strong correlation to improvements in household consumption and income. Roads also act as a key element to social cohesion by acting as a median for integration of bordering regions. This social integration promotes a decreased gap in income along with diversity and a greater sense of community that can play a large role in decreasing rates of poverty.

Conversely, deterioration of roads can have adverse effects on a community and may bring about important and unanticipated welfare effects that the governments should be aware of when cutting transportation budgets. Poor road conditions increase fuel and tire consumption while shortening intervals between vehicle repair and maintenance. In turn, these roads result in delayed or more expensive deliveries for businesses and consumers. Economic effects of poor road networks, such as time consuming and costly rehabilitation, can be reduced if a proactive maintenance approach is successfully implemented. To accomplish this, a pavement assessment and analysis should be completed every few years in an effort update the budget models and rehabilitation plans. As shown below, the IMS Laser Road Surface Tester (featured in **Figure 4**) was mobilized to Tukwila to conduct an objective survey.

Figure 4 – Laser Road Surface Tester (RST)

3.0 THE PAVEMENT MANAGEMENT PROCESS

3.1 FUNCTIONAL CLASS REVIEW

As part of the scope of this assignment, the functional classification designations currently used in the Tukwila pavement management program were adopted for their use in the pavement analysis.

Although there is no uniform standard for classifying pavement into functional classes, The Federal Highway Administration (FHWA), American Public Works Association (APWA) and Institute of Transportation Engineers (ITE) offer some broad guidelines on how to assign classifications that were followed in this study.

The City's functional classification definitions used in the assessment are as follows:

1. **Principal Arterial (PART)** – all cross City corridors consisting of 2 to 4 or more lanes, generally spaced at 1 mile intervals with daily traffic counts generally exceeding 20,000 vehicles per day. Major cross City corridors with a landscaped median were also assigned to Principal Arterials.
2. **Minor Arterial (MnART)** – Continuous and discontinuous cross city and inter-district corridors that are 2 to 4 lanes across and generally have a centerline stripe or a designated bus route. The ADT generally falls in the 10,000 to 20,000 vehicle per day range. They are typically spaced on the ½ or ¼ mile section line and on occasion, may have a short non-landscaped median.
3. **Collector (COL)** – Continuous and discontinuous cross City and inter-district corridors that are 2 to 4 lanes across and generally have a centerline stripe or a designated bus route. The ADT generally falls in the 1,000 to 10,000 vehicle per day range. They are typically spaced on the ½ or ¼ mile section line and on occasion, may have a short non-landscaped median. Major collectors are also assigned to streets segments leading to, or adjacent to, a major traffic generator site such as a regional shopping complex. Collectors form the entrance to communities and may have a decorative landscaped median of short duration.
4. **Local (LOC)** – These are the majority of the street segments consisting of all residential roads not defined above or as industrial/commercial.

The paved roadway network consists of 4 functional classes, covering approximately 80.5 miles of pavement. The average pavement condition index (PCI) of the roadway network is a 65.6 and the network's primary pavement type is asphalt. The following table and **Figure 5** summarize the functional classification splits within the system.

City of Tukwila, WA
Network Summary by Functional Class

	Pavetype	Network	Principal Arte	Minor Arterial	Collector	Local
Segment (Block) Count	All Streets	772	88	106	118	460
	Asphalt	772	88	106	118	460
Network Length (ft):	All Streets	424,955	68,822	75,039	65,880	215,214
	Asphalt	424,955	68,822	75,039	65,880	215,214
Network Length (mi):	All Streets	80.5	13.0	14.2	12.5	40.8
	Asphalt	80.5	13.0	14.2	12.5	40.8
Average Width (ft):	All Streets	34.1	55.5	41.3	33.5	24.9
	Asphalt	34.1	55.5	41.3	33.5	24.9
Network Area (yd2):	All Streets	1,610,369	424,563	344,088	245,128	596,590
	Asphalt	1,610,369	424,563	344,088	245,128	596,590
Current Pavement Condition	All Streets	66	65	67	63	65
Index (CPCI)	Asphalt	66	65	67	63	65
Pavement Condition Index	All Streets	66	66	68	64	65
(Surveyed PCI)	Asphalt	66	66	68	64	65
Current Backlog (%)	All Streets	1	Percentage of Network with a PCI < 40			
Current Network Index	All Streets	65	Managable Network Index			
Surface Distress Index (SDI)	All Streets	65	60	66	63	69
7/16/20	Asphalt	65	60	66	63	69
Roughness Index (RI)	All Streets	66	76	70	65	58
7/16/20	Asphalt	66	76	70	65	58

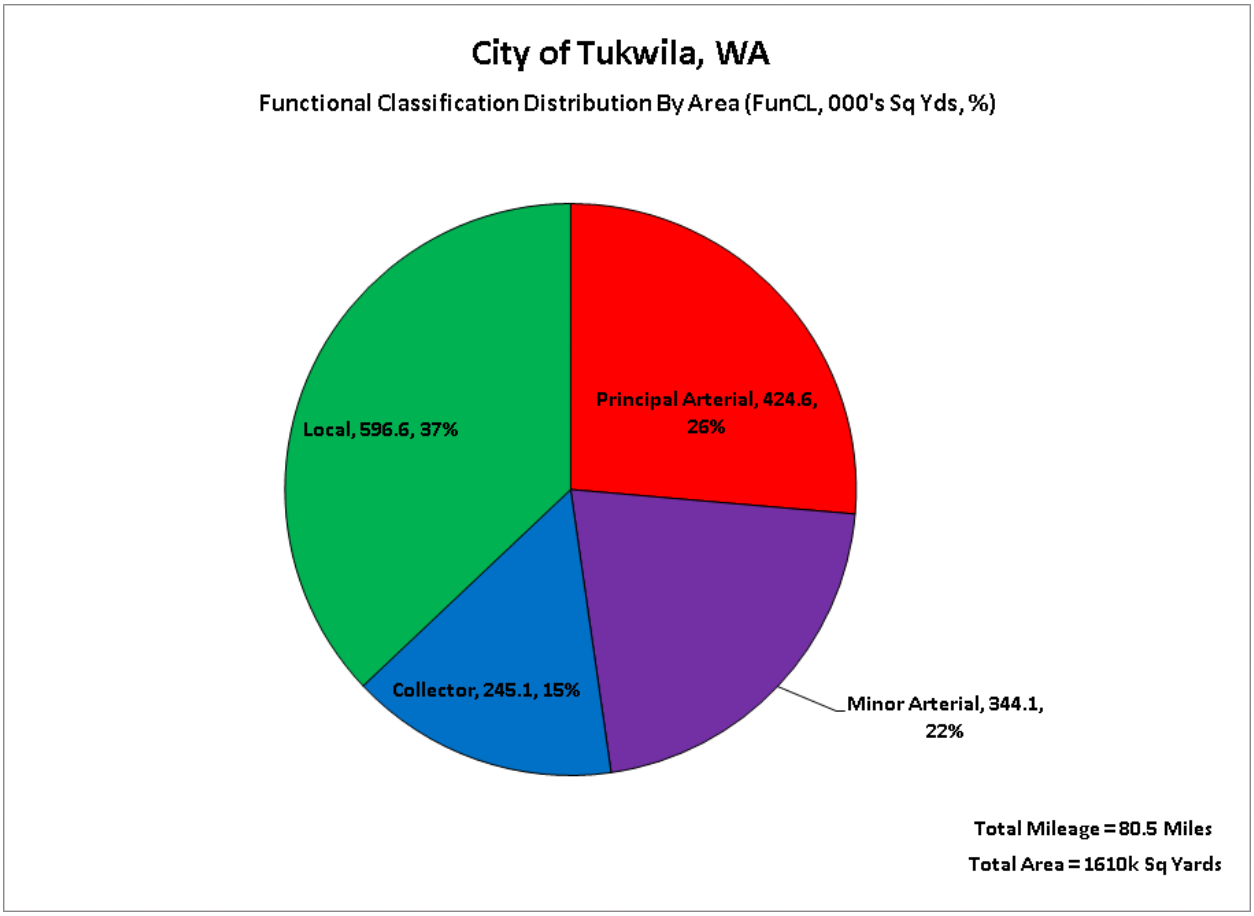

Figure 5 – Functional Class Distribution by Mileage

As discussed later in this report, the functional classifications also play a critical role in the rehabilitation candidate selection process as Arterials are generally given preference over other rehab candidates due to their higher traffic counts and steeper deterioration curves.

The following figure (**Figure 6**) highlights the functional classifications used for the Tukwila roadway network. An electronic version of this map is appended to this report.

Figure 6 – Tukwila Functional Classification Designation

3.2 ASSEMBLY OF DATA INTO PROJECTS

Tukwila's Geographic Information System (GIS) was used as the basis for segmenting the roadway network on a block-by-block basis. Each segment was assigned a unique identifier referred to as a GISID, establishing a one-to-one relationship between the GIS and the street inventory. The segments form the basic building block of the pavement management system and are where all attribute and condition data are stored.

The centerline segments were aggregated together within the pavement management system to form logical projects that the analysis and rehabilitation program are developed against.

- Arterial projects run from major intersection to major intersection up to 1 mile in length.
- Similar to arterials, collector streets within a neighborhood were aggregated together to form a single project where practical.
- Local streets along a homogenous route were aggregated together along with adjacent side streets to form a small neighborhood based approach.

Segments were joined only when the pavement condition and functional classification were homogeneous in nature such that when joined they have a relatively uniform condition that may be rehabilitated using a single strategy.

The following figure (**Figure 7**) highlights the projects, used for the analysis. An electronic version of this map is appended to this report.

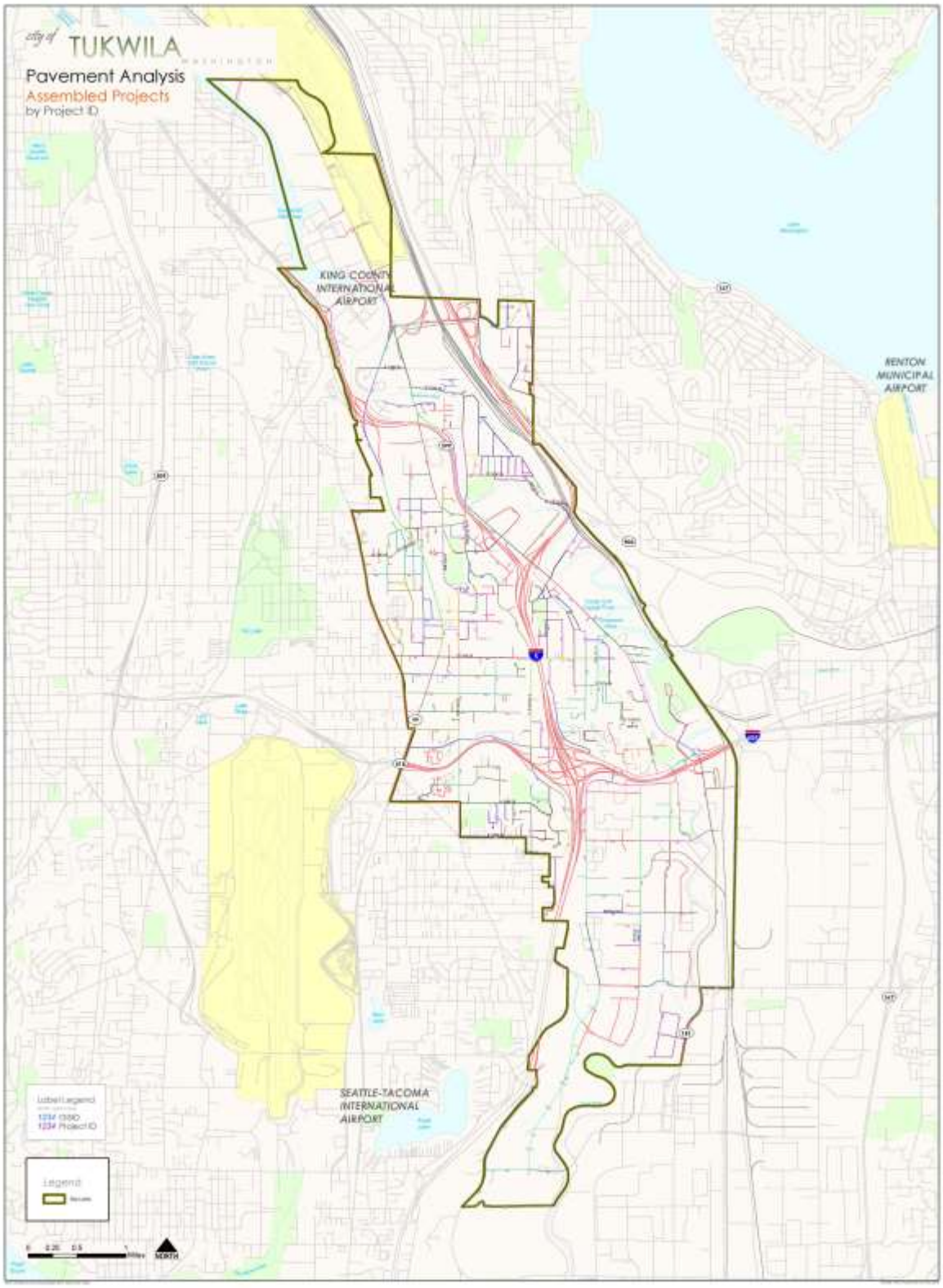

Figure 7 – Tukwila Assembled Projects

3.3 FIELD SURVEY METHODOLOGY

Following a set of predefined assessment protocols matching the pavement management software (ASTM D6433), a specialized piece of survey equipment – referred to as a Laser Road Surface Tester (Laser RST, pictured on page 5) – is used to collect observations on the condition of the pavement surface, as well as collect high definition digital imagery and spatial coordinate information. The Laser RST surveys each local street from end to end in a single pass, while all other roadway classifications are completed in two passes.

Key pavement condition data elements collected by the Laser RST include:

Surface Distress Index – The Laser RST collects surface distress observations based on the extent and severity of distresses encountered along the length of the roadway following ASTM D6433 protocols for asphalt and concrete pavements. The surface distress condition (cracking, potholes, raveling, and the like) is considered by the traveling public to be the most important aspect in assessing the overall pavement condition.

Presented on a 0 to 100 scale, the Surface Distress Index (SDI) is an aggregation of the observed pavement defects. Within the SDI, not all distresses are weighted equally. Certain load associated distresses (caused by traffic loading), such as rutting or alligator cracking on asphalt streets, or divided slab on concrete streets, have a much higher impact on the surface distress index than non-load associated distresses such as raveling or patching. Even at low extents and moderate severity – less than 10% of the total area – load associated distresses can drop the SDI considerably. ASTM D6433 also has algorithms within it to correct for multiple or overlapping distresses within a segment.

For this project, extent and severity observations were collected, processed, and loaded into the pavement management software. Within the software, the following distresses, listed in order from greatest to lowest impact, are presented as a 0 to 10 rating for review and reporting:

- Alligator Cracking – Alligator cracking is quantified by the severity of the failure and number of square feet. Even at low extents, this can have a large impact on the condition score as this distress represents a failure of the underlying base materials.
- Wheel Path Rutting – Starting at a minimum depth of ¼ inch, wheel path ruts are quantified by their depth and the number of square feet encountered. Like alligator cracking, low densities of rutting can have a large impact on the final condition score.
- Longitudinal, Transverse, Block (Map), and Edge Cracks – These are quantified by their length and width. Longitudinal cracks that intertwine are the start of alligator cracking.
- Patching – Patching is quantified by the extent and quality of patches. When the majority of a roadway surface is covered by a patch, such as a large utility replacement, the rating of the patch is minimized. All potholes are rated as patches.
- Distortions – All uneven pavement surfaces, such as depressions, bumps, sags, swells, heaves, and corrugations, are included as distortions and are quantified by the severity and extent of the affected area.
- Raveling – Raveling is the loss of fine aggregate materials on the pavement surface and is measured by the severity and number of square feet affected.

- Bleeding – Bleeding is the presence of free asphalt on the roadway surface caused by too much asphalt in the pavement or insufficient voids in the matrix. The result is a pavement surface with low skid resistance and is measured by the amount and severity of the area.
- Similar distresses were collected for concrete streets including divided slab, corner breaks, joint spalling, faulting, polished aggregate, and scaling.

Roughness Index – Roughness is recorded following the industry standard "International Roughness Index" (IRI), a measure of the change in elevation over a distance expressed as a slope and reported in millimeters/meter. The IRI value is converted to a 0 to 100 score and reported as the Roughness Index (RI) as follows:

$$\mathbf{RI} = (11 - 3.5 \times \ln(IRI)) \times 10$$

ln(IRI) is the natural logarithm of IRI.

In common terms, a newer street would generally have a Roughness Index above 85, while one due for an overlay would be in the range 40 to 70. Failed streets typically have roughness values below 40.

Structural Index – The network of streets was not tested for structural adequacy, instead, the relationship between the final pavement condition score and amount of load associated distresses was analyzed and each pavement section assigned a Weak, Moderate or Strong strength rating. The assigned structural index (30, 60 or 80 for weak, moderate and strong respectively) was not used in determining the overall pavement condition score, but simply to classify the pavement strength and aid in selecting appropriate rehabilitation strategies.

Pavement Condition Index (PCI) – Following our field surveys, the condition data is assembled to create a single score representing the overall condition of the pavement. The Pavement Condition Index (PCI) is calculated as follows:

PCI = 33% Roughness Index + 67% Surface Distress Index

Development of the pavement management plan and budgets were completed using Tukwila - specific rehabilitation strategies, unit rates, priorities, and pavement performance curves. The process was iterative in its attempt to obtain the greatest efficiency and cost benefit.

4.0 TUKWILA SURVEY PAVEMENT CONDITION

4.1 UNDERSTANDING THE PAVEMENT CONDITION INDEX

The following compares the Pavement Condition Index (PCI) to commonly used descriptive terms. Divisions between the terms are not fixed, but are meant to reflect common perceptions of condition.

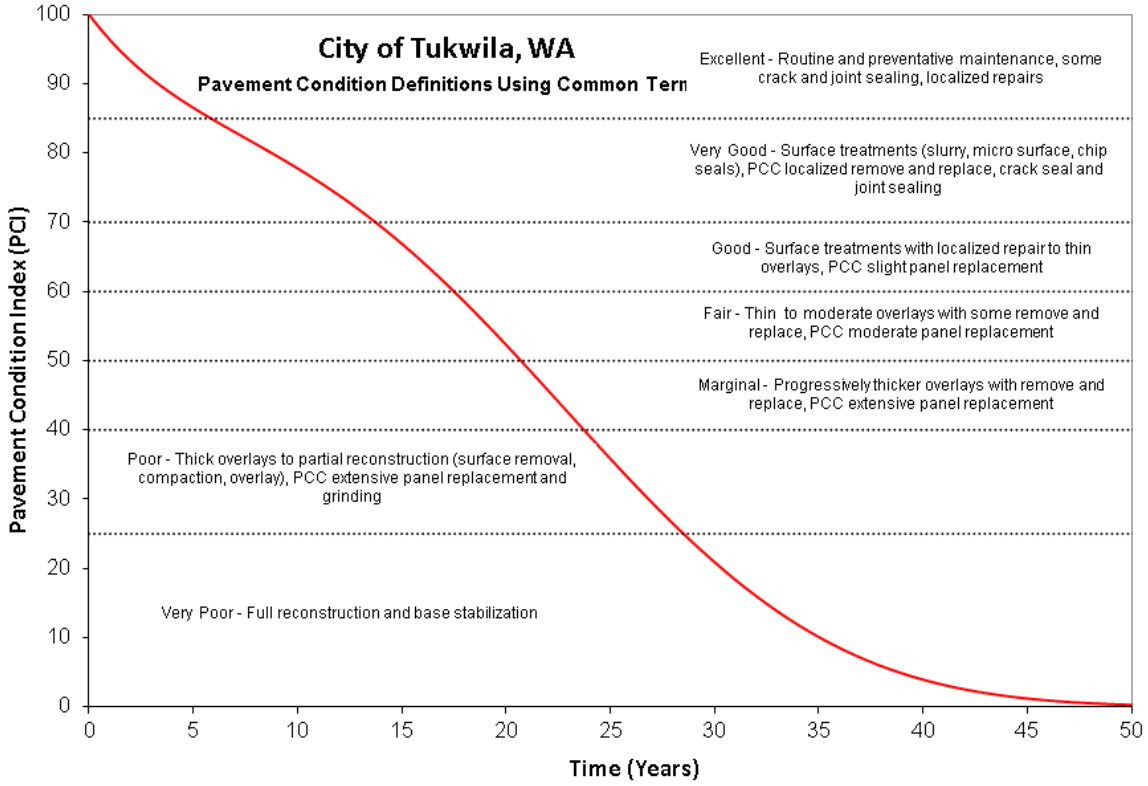

Figure 8 – Understanding the Pavement Condition Index (PCI) Score

The following table details a general description for each of these condition levels with respect to remaining life and typical rehabilitation actions:

PCI Range	Description	Relative Remaining Life	Definition
85 – 100	Excellent	15 to 25 Years	Like new condition – little to no maintenance required when new; routine maintenance such as crack and joint sealing.
70 – 85	Very Good	12 to 20 Years	Routine maintenance such as patching and crack sealing with surface treatments such as seal coats or slurries.
60 – 70	Good	10 to 15 Years	Heavier surface treatments, chip seals and thin overlays. Localized panel replacements for concrete.
40 – 60	Marginal to Fair	7 to 12 Years	Heavy surface-based inlays or overlays with localized repairs. Moderate to extensive panel replacements.
25 – 40	Poor	5 to 10 Years	Sections will require very thick overlays, surface replacement, base reconstruction, and possible subgrade stabilization.
0 – 25	Very Poor	0 to 5 Years	High percentage of full reconstruction.

4.2 TUKWILA NETWORK CONDITION IMAGERY

The images presented below provide a sampling of the Tukwila streets that fall into the various condition categories with a discussion of potential rehabilitation strategies.

Very Poor (PCI = 0 to 25) – Complete Reconstruction

62nd Avenue from 151st Street to South 151st Street (GISID 1004, PCI = 25) – Rated as Very Poor, this street displays spreading base failure as evidenced by the severe alligator cracking and patching. It is also worth noting that the patching along the left hand side of the street has severely deteriorated as evident by the alligator cracking surrounding the patched areas. A mill and overlay on this street would not be suitable as the base has failed and would not meet an extended service life of at least 15 years. This street requires a full reconstruction and should be carefully monitored.

Deferral of reconstruction of streets rated as Very Poor will not cause a substantial decrease in pavement quality as the streets have passed the opportunity for overlay-based strategies. Due to the high cost of reconstruction, Very Poor streets are often deferred until full funding is available in favor of completing more streets that can be rehabilitated at lower costs, resulting in a greater net benefit to the City. This strategy however must be sensitive to citizen complaints forcing the street to be selected earlier. In addition, this type of street can pose a safety hazard for motorists, since severe potholes and distortions may develop. It is important to consistently monitor these streets and check for potholes or other structural deficiencies until the street is eventually rebuilt.

Poor (PCI = 25 to 40) – Last Opportunity for Surface Base Rehabilitation

Boeing Access Road from Martin L King Jr Ramp to Martin L King Way (GISID 1975, PCI = 35) – Rated as Poor, this segment still has some remaining life before it becomes a critical reconstruction need. As evident in the imagery, most of the cracks have been properly sealed. On this street, the base is showing signs of failure in areas exhibiting alligator/fatigue cracking. The severely cracked areas are isolated and do not persist throughout the entire segment length and cross section. These areas should be dug out and structurally patched to attain the maximum life from any potential rehabilitation efforts. If left untreated, within a short period of time, a full reconstruction would be required.

On arterial roadways, Poor streets often require partial to full reconstruction – that is removal of the pavement surface and base down to the subgrade and rebuilding from there. On local roadways, they require removal of the pavement surface through grinding or excavation, base repairs, restoration of the curb line and drainage, and then placement of a new surface.

In general, the service life of Poor streets is such that if deferred for too long, it would require a more costly reconstruction. Streets rated as Poor are typically selected first for rehabilitation as they provide the greatest cost/benefit to the City – that is the greatest increase in life per rehabilitation dollar spent.

Marginal (PCI = 40 to 50) – Progressively Thicker Overlays

Fun Center Way from East Interurban Avenue to South West Grady Way (GISID 1364, PCI = 48) – Rated as marginal with a PCI score at the lower range between Marginal and Poor streets. Marginal streets have distresses that tend to be localized and moderate in nature – that is they do not extend the full length of the segment and can be readily dug out and repaired. This street segment highlights this characteristic as the failed area does not quite extend the full length or width of the roadway and is still serviceable. However, it also highlights the relationship between base and pavement quality. Placing an overlay on this street without repairing the base would not achieve a full 15 year life as the failure would continue to occur over time. Structural patching of the failed areas along localized rehabs would permit a full width grind and inlay on this street segment and return it to full service. The curb lines are straight and drainage is functioning well.

Marginal streets that display high amounts of load associated distresses are selected as a priority for rehabilitation as they provide the greatest cost/benefit to the City. If left untreated, Marginal streets with high amounts of load associated distresses would deteriorate to become partial reconstruction candidates. Marginal streets that are failing due to materials issues or non-load associated failures may become suitable candidates for thick overlays if deferred, without a significant cost increase.

Fair (PCI = 50 to 60) – Thin to Moderate Overlays

Interurban Avenue From Macadam Road to Gateway Drive (GISID 1998, PCI = 53) – Rated in the Fair category, these streets require thin to moderate overlays for asphalt when they enter their need year (generally within 2-3 points of the lower PCI in the defined range). Several distresses are present, but tend to be more localized and moderate in severity, and non-load related (primarily longitudinal and transverse cracking and raveling). On this segment of road, the signs of deterioration are evident in the right hand travel lane of the pavement and are moderate in severity indicating the base has not yet failed along the entire length of roadway. The curb line is straight through the sidewalk could benefit from some preventative maintenance to prevent damage from weed intrusion.

Asphalt streets rated as Fair tend to receive a lower priority when developing a rehabilitation program. If deferred, the rehabilitation cost would only increase by about $3 to $5/yd2, again depending on the functional classification, in about 5 to 10 years. This delay represents a 20% difference over the time stated. Thus, the cost of deferral is low when compared to deferring a thick overlay to a reconstruction with a two to threefold increase in cost.

Good (PCI = 60 to 70) – Surface Treatments to Thin Overlays

Macadam Road from 149th Lane to 150th Street (GISID 2064, PCI = 62) – Rated as Good with the primary cause of deterioration the transverse and longitudinal cracking, as well as patching. It also displays small amounts of load associated distresses that can easily be removed to restore the visual appearance of the roadway. The existing cracks should be sealed and the pavement surface restored, with a heavier surface treatment such as microsurfacing or double slurry to fully waterproof the pavement and cover the crack sealant. The occasional dig out and replacement may be required to correct localized deficiencies. Alternatively, depending on the extent of the distressed areas, base strength and drainage, a thin overlay may be applied.

Asphalt streets rated as Good are ideal candidates for thinner surface-based rehabilitations and local repairs. Depending on the amount of localized failures, a thin edge mill and overlay, or possibly a surface treatment, would be a suitable rehabilitation strategy for streets rated as Good. Streets that fall in the high 60 - low 70 PCI range provide the greatest opportunity for extending pavement life at the lowest possible cost, thus applying the principles of the perpetual life cycle approach to pavement maintenance. The adjacent photo is a great example of a street segment (not a Tukwila Road) that displayed low load associated distresses and thus, high structural characteristics, and once the distressed areas were replaced, a slurry seal was applied. The patching accounted for less than 5 to 10% of the total area and resulted in a good looking, watertight final surface at a much lower cost than an overlay with less disruption to the neighborhood and curb line. The patches were paver laid and roller compacted.

Very Good (PCI = 70 to 85) – Surface Treatments and Localized Rehabilitation

West Valley Highway from Strander Boulevard to 180th Street (GISID 1293, PCI = 73) – Rated as Very Good, this road displays minor amounts of transverse cracking and patching. The surface is non-weathered, and the base is still strong. This street is an example of a candidate for preventative maintenance and light weight surface treatments to extend the life of a roadway.

Asphalt streets rated as Very Good generally need lightweight surface-based treatments such as surface seals, slurries, chip seals or microsurfacing. Routine maintenance such as crack sealing and localized repairs often precede surface treatments. The concept is to keep the cracks as waterproof as possible through crack sealing and the application of a surface treatment. By keeping water out of the base layers, the pavement life is extended without the need for thicker rehabilitations such as overlays or reconstruction. Surface treatments also tend to increase surface friction and visual appearance of the pavement surface but do not add structure or increase smoothness.

Surface treatments may include:

- *Double or single application of slurry seals (slurries are a sand and asphalt cement mix).*
- *Microsurfacing – asphalt cement and up to 3/8 sand aggregate.*
- *Chip seals and cape seals (Chip seal followed by a slurry).*

Additional cost benefits of early intervention include:

- *Less use of non-renewable resources through thinner rehabilitation strategies.*
- *Less intrusive rehabilitation and easier to maintain access during construction.*
- *Easier to maintain existing drainage patterns.*

Excellent (PCI = 85 to 100)

Southcenter Parkway (GISID 1343, PCI = 93) – Rated as Excellent, displaying little to no surface distresses. The ride is smooth and the surface is non-weathered and the base is strong. In a couple of years, this street segment would be an ideal candidate for routine maintenance activities such as crack sealant rehabilitation.

In terms of pavement management efficiency, a program based on worst-first, that is starting at the lowest rated street and working up towards the highest, does not achieve optimal expenditure of money. Generally, under this scenario, agencies can not sufficiently fund pavement rehabilitation and lose ground despite injecting large amounts of capital into the network.

The preferred basis of rehabilitation candidate selection is to examine the cost of deferral of a street, against increased life expectancy.

4.3 EVALUATING THE PAVEMENT QUALITY AND BACKLOG

The concept of the Pavement Condition Index (PCI) score, backlog percentage and number of streets rated as Excellent must be fully understood in order to understand and develop an effective pavement management program. These three metrics should fall into certain ranges in order to measure the quality and long term viability of a network.

The PCI score indicates the overall pavement condition and represents the amount of equity in the system; it is the value most commonly considered when gauging the overall quality of a roadway network. It may also be used to define a desired level of service: that is, an agency may wish to develop a pavement management program such that in five years the overall network score meets a set minimum value. Obviously, the higher the PCI score the better off the overall network condition is. Agencies with an average PCI score above 80 (when considering surface distress, roughness and possibly strength) are rare and found only in a few select communities. Less than 1 in 20 communities surveyed by IMS have that high of a condition average. Averages between 65 and 80 are indicative of either newer networks, or ones that have an ongoing pavement rehabilitation program and tend to be fully funded. Scores between 60 and 65 are common and represent a reasonable average providing a satisfactory balance between levels of service and funding, and when taken with the other two metrics may represent a well-managed and funded network. A minimum score of 60 means that overall the network falls at the lower end of the range where light weight surface treatments and thin overlays are the standard rehabilitation practice. Below a 60 means an agency has to rely on more costly rehabilitations and reconstructions to address condition issues.

At the upper end of the condition scale, a minimum of 15% of the network should be rated as Excellent. Generally, at or above 15%, means that a noticeable percentage of the roadway network is in like new condition, requiring only routine maintenance. While higher percentages of streets rated as Excellent are certainly desirable, the annual cost to maintain rates at higher multiples is often cost prohibitive. Below 15% means the agency is struggling to effectively rehabilitate their network on an annual basis. The 15% marker represents a cost effective balance between annual investment and satisfactory level of service.

Backlog roadways are those that have dropped sufficiently in quality to the point where surface based rehabilitation efforts would no longer prove to be cost effective. These roadways are rated Poor or Very Poor and will require either partial or total reconstruction. Backlog is expressed as the percentage of roads requiring reconstruction as compared to the network totals.

It is the backlog, however, that defines the amount of legacy work an agency is facing and is willing to accept in the future. It is the combination of the three metrics that presents the true picture of the condition of a roadway network, and conversely defines improvement goals.

Generally, a backlog of 10% to 15% of the overall network is considered manageable from a funding point of view with 12% being a realistic target. Fifteen percent (15%) is used as a control limit to indicate the maximum amount of backlog that can be readily managed. Backlog rates below 10%, again are certainly desirable, but financially unachievable for a large percentage of agencies. Backlogs approaching 20% or more tend to become unmanageable, unless aggressively checked through larger rehabilitation programs, and will grow at an alarming rate. At 20% a tipping point has been met and the backlog tends to increase faster than an agency's ability to reconstruct their streets.

4.4 TUKWILA NETWORK CONDITION DISTRIBUTION

Figure 9 presented below shows the distribution of pavement condition for the roadway network in Tukwila. The average PCI for the network is 65.6. While direct comparisons to other agencies are difficult due to variances in ratings systems, Tukwila is slightly above average when compared to other agencies recently surveyed by IMS, which typically fall in the 60 to 65 range.

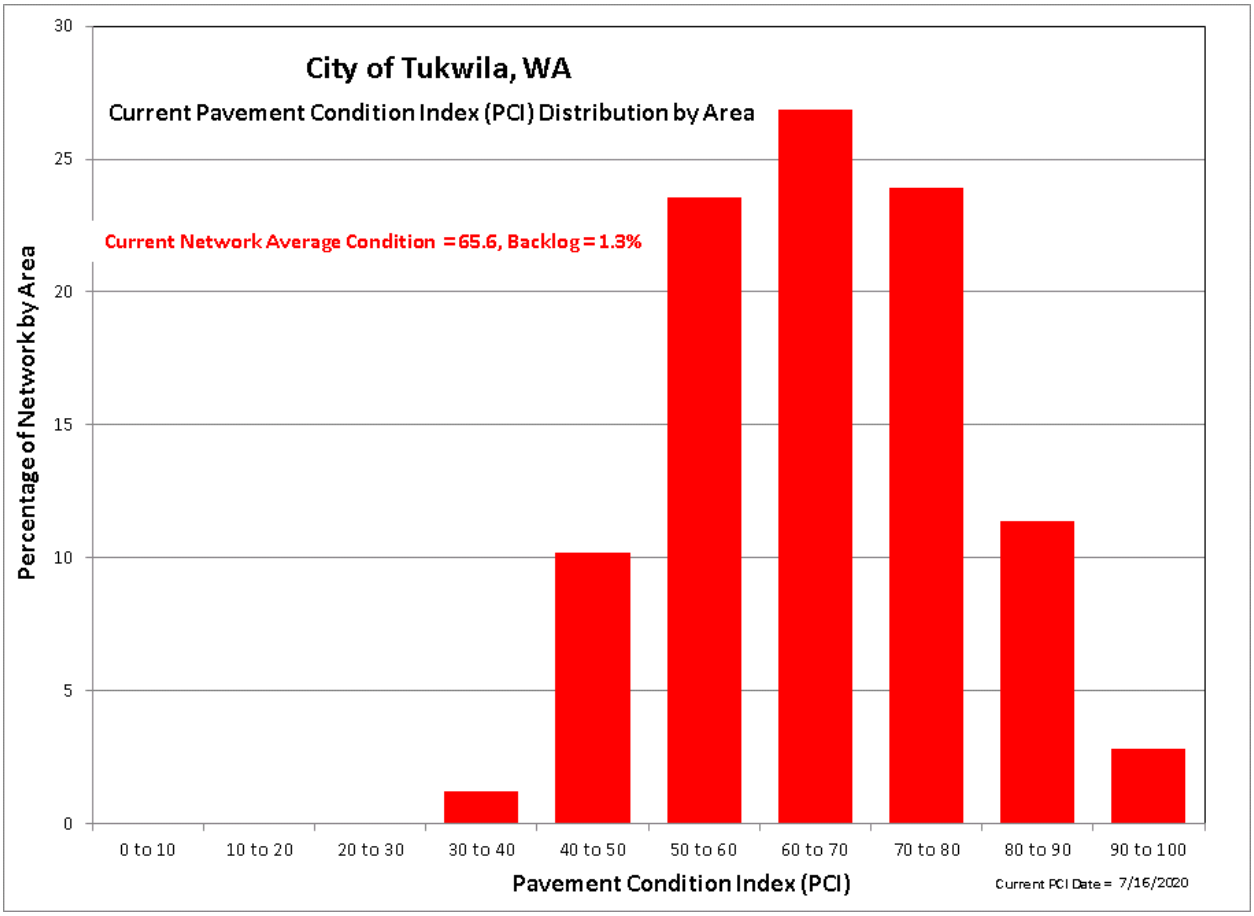

Figure 9 – Roadway Network Present Status

- This is reflective of a moderately aged network that has had some roadway renewal effort.
- Simultaneously, the City has a moderate sample of streets that are approaching the end of their life where surface based rehabilitations, such as overlays, can be effective.
- Traditionally we expect to see a bell curve that is skewed to the right and centered between a PCI of 60 and 70. The Tukwila network curve illustrated above follows this norm and shows the positive impact of recent roadway renewal effort over the last several years.

The following graph **(Figure 10)** plots the same pavement condition information, but instead of using the actual Pavement Condition Index (PCI) value, descriptive terms are used to classify the roadways.

- Six percent (6%) of the network can be considered in Excellent condition and require only routine maintenance.
- Thirty-two percent (32%) of the network falls into the Very Good classification. These are roads that benefit most from preventative maintenance techniques such as microsurfacing, slurry seals and localized panel repairs.
- Thirty-two percent (32%) of the streets are rated as Good and are candidates for lighter surface-based rehabilitations such as thin overlays or slight panel replacements.
- Twenty-four percent (34%) of network can be considered Fair to Marginal condition representing candidates for progressively thicker overlay-based rehabilitation or panel replacements. If left untreated, they will decline rapidly into reconstruction candidates.
- The remaining one percent (1%) of the network is rated as Poor or Very Poor, meaning these roadways have failed or are past their optimal due point for overlay or surface-based rehabilitation and may require progressively heavier or thicker forms of rehabilitation (such as extensive panel replacement, surface reconstruction or deep patch and paving) or total reconstruction.

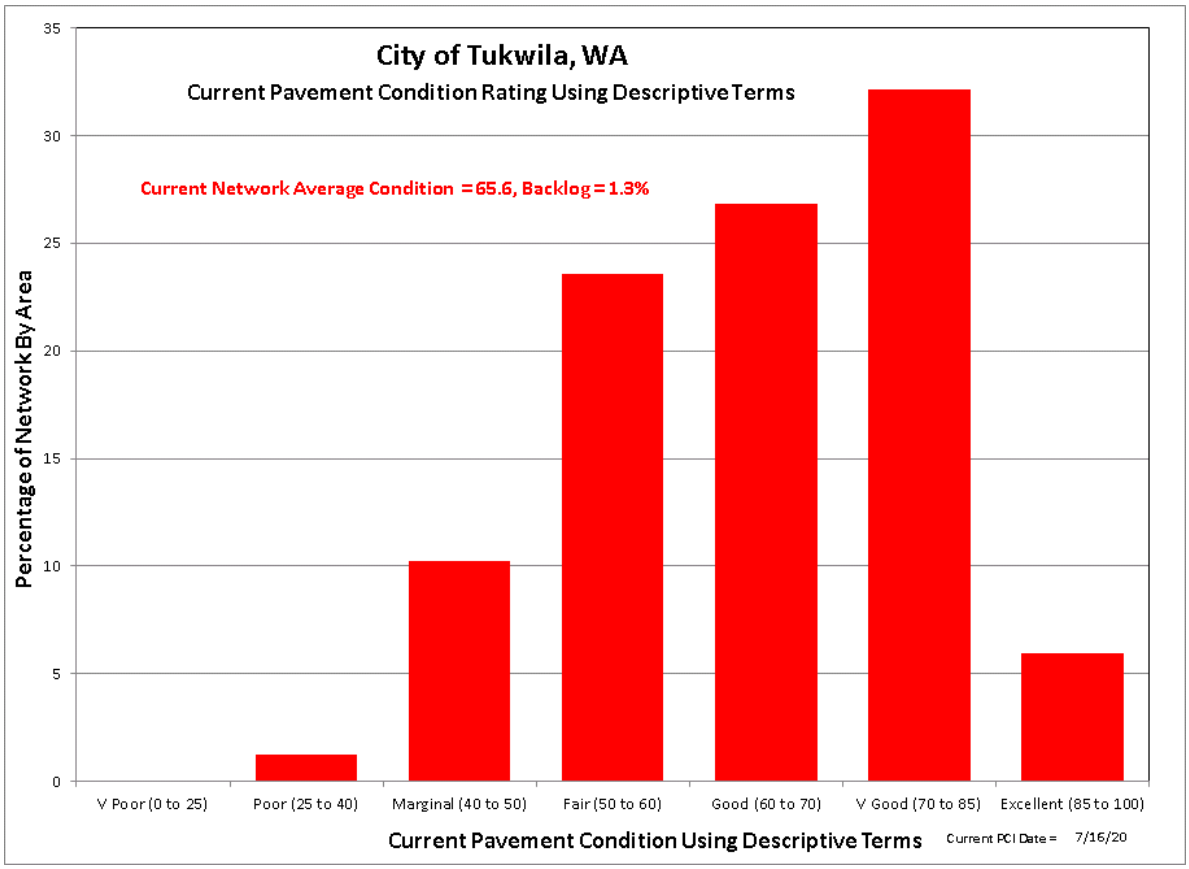

Figure 10 – Roadway Network Present Status Using Descriptive Terms

Figures 11 and 12 present the surveyed condition of the streets using PCI and Good-Fair-Poor descriptive terms, respectively. Electronic versions of these maps are appended to this report.

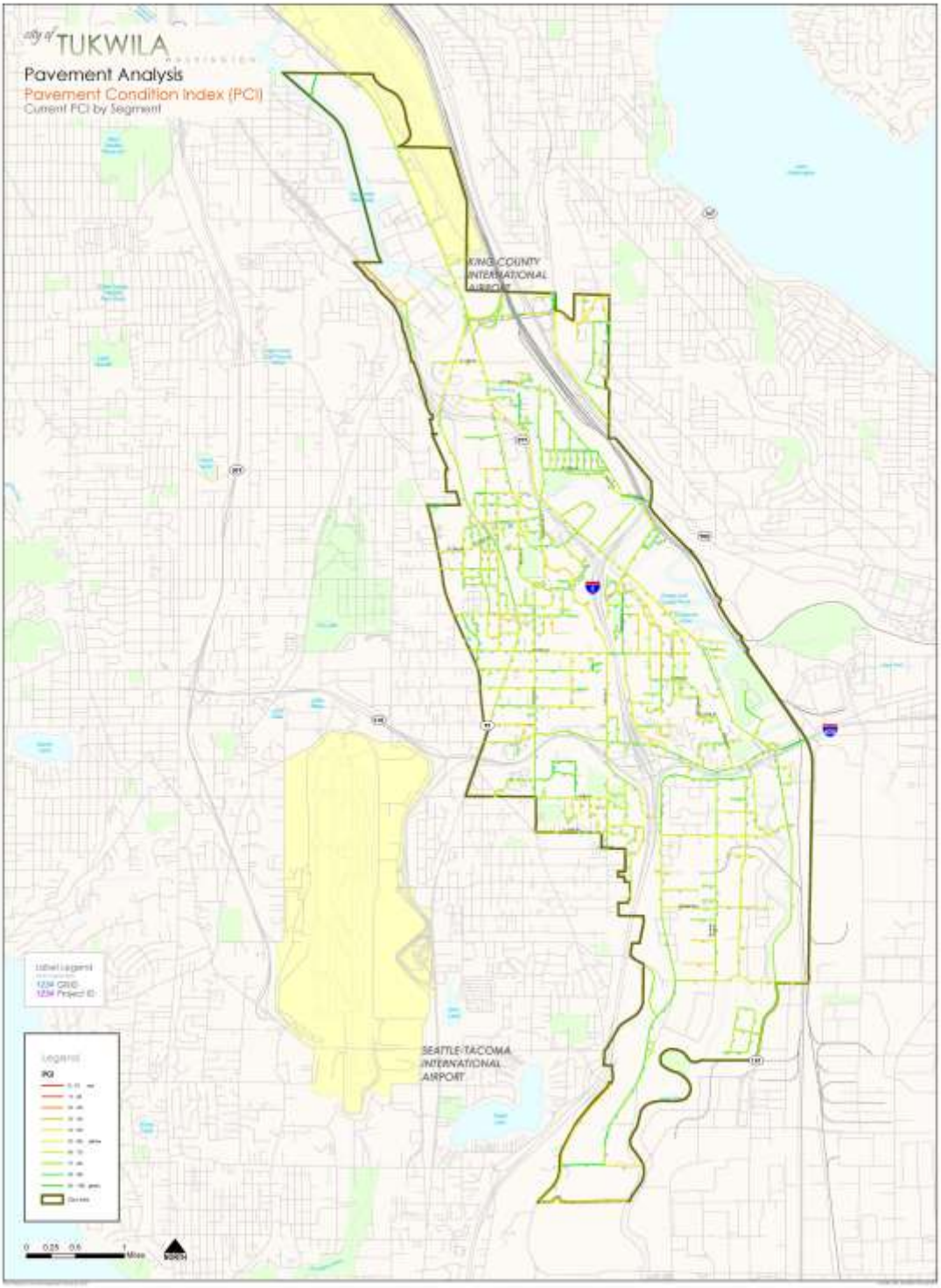

Figure 11 – Tukwila by Segment Using Pavement Condition Index (PCI)

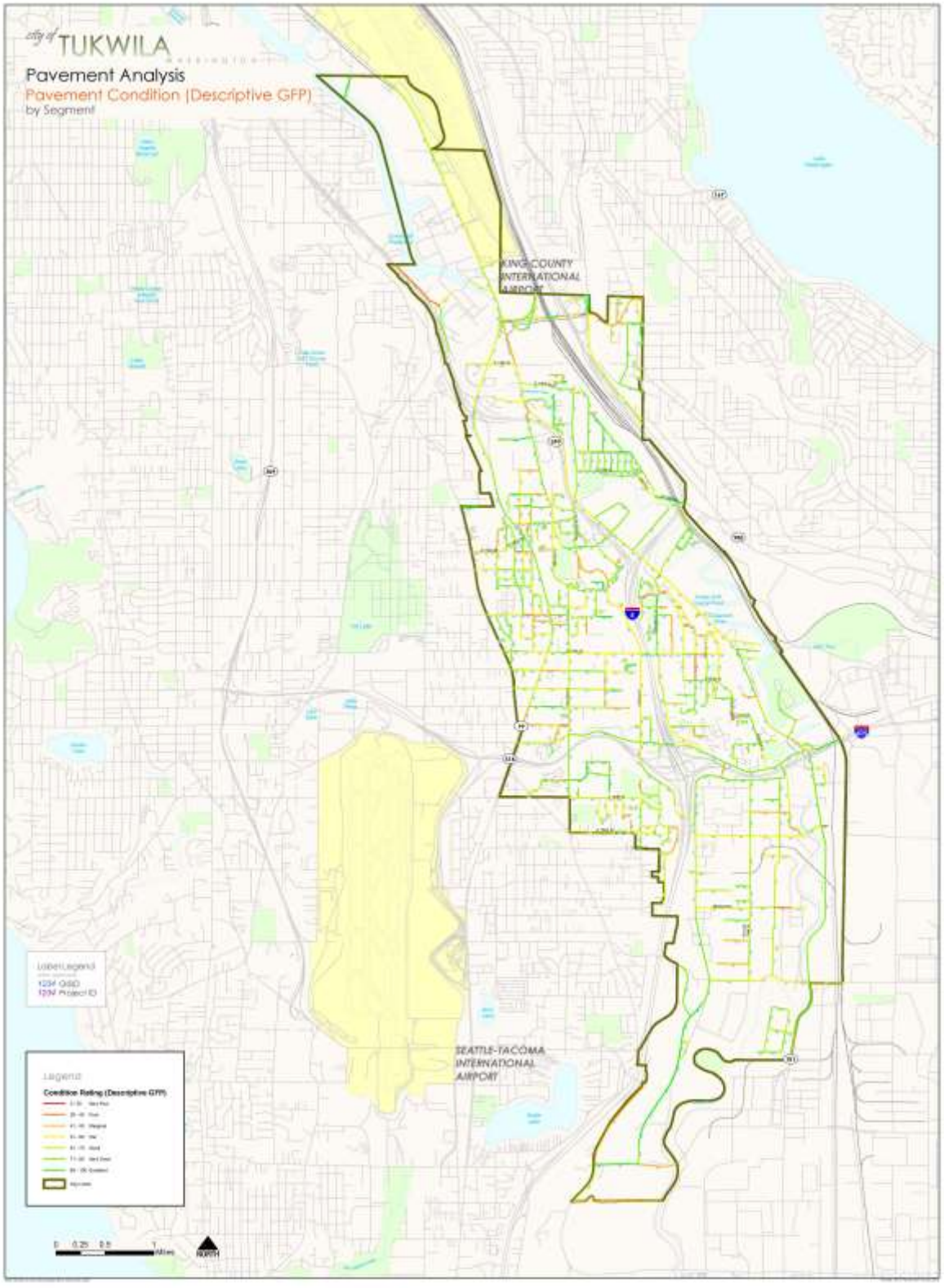

Figure 12 – Tukwila Pavement Condition by Segment Using Descriptive Terms

4.5 CONDITION BY FUNCTIONAL CLASSIFICATION

Figure 13 highlights the pavement condition distribution for the arterial, collector, and local streets. Keep in mind that arterial roadways, the streets that have the majority of traffic use and link various parts of the city together, may be considered the thoroughfares of the city and during the budget development process, should receive the highest priority when selecting rehabilitation candidates.

- The **principal arterial network** has an average PCI of **65**
- The **minor arterial network** has an average PCI of 67
- The **collector network** has an average PCI of **63**
- The **local network** has an average PCI of **65**

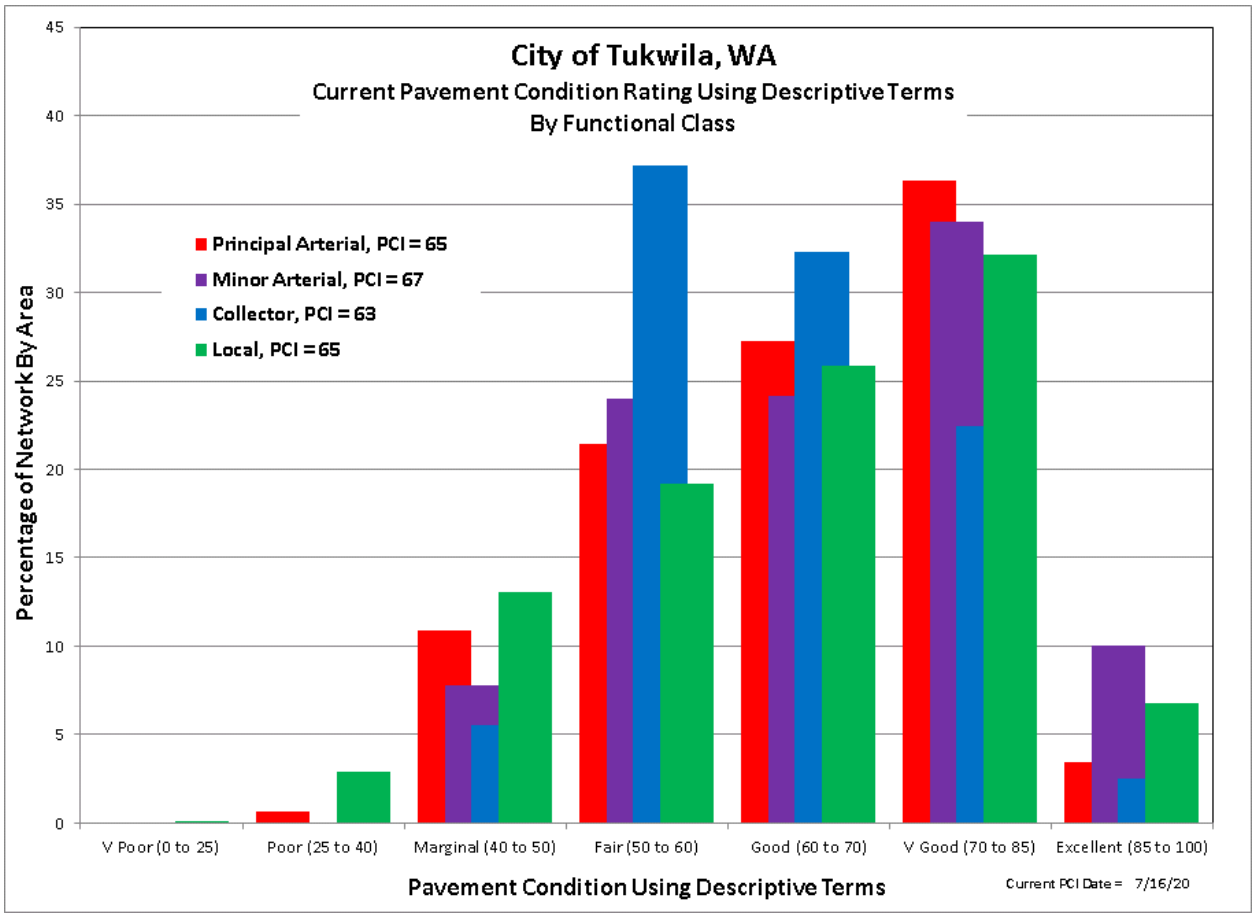

Figure 13 – Condition Rating by Functional Classification

4.6 STRUCTURAL AND LOAD ASSOCIATED DISTRESS ANALYSIS

Structural testing and analysis was not performed for the City of Tukwila. Instead, analysis of the cause of pavement failure for these street segments was completed by examining the types of distresses that have caused the PCI score to drop.

Surface distresses may be categorized into two classifications – load associated distresses (LADD) and non-load associated distresses (NLAD). Load associated distresses are those that are directly related to traffic loading and structural capacity. Non-load associated distresses are those that result from materials or environmental issues including shrinkage (transverse) cracking, bleeding and raveling. Generally, load associated distresses affect the overall condition score more than non-load associated distresses – as is the case in Tukwila. For asphalt streets, roadways were classified as Weak, Moderate, or Strong.

The purpose of the structural analysis is twofold:

- The structural analysis provides input into which performance curve each segment is to use – performance curves are used to predict pavement deterioration over time.
- Structural analysis assists in rehabilitation selection by constraining inadequate pavement sections from receiving too light of a rehabilitation and conversely, identifying segments suitable for lighter weight treatment.

Figure 14 plots the relationship of the load associated distresses (shown in red) against pavement condition. As can be seen from the plot, at higher PCI scores, most pavements fall into the moderate strength classification as the distresses have not yet begun to manifest themselves into severe failures. As the PCI score drops, the load associated distresses typically affect the PCI score to a higher degree with more segments being classified as weak. Conversely, segments that have a declining PCI score and low LADD, are classified as strong as they display few load associated failures. High PCI score (above 60) rehab selections should focus on pavement preservation activities such as surface treatments or thin overlays, possibly with some localized pavement repairs and crack sealing.

The sum of the Load-Associated Distress deducts (LADD) is also used to qualify the appropriate rehabilitation strategy selection in addition to the overall pavement condition score. For example, a street that has a good PCI score (that is between 60 and 70) and is displaying relatively low load associated distress deducts would be a suitable candidate for a surface treatment in place of a thin overlay in that the PCI score is more influenced by materials issues such as transverse cracking or raveling.

Overall, the low amounts of streets exhibiting weak performance can generally be attributed to poor subgrade conditions, insufficient pavement thickness and increased traffic loading – in particular heavy, side-loading garbage and recycling trucks (an unintended consequence of green initiatives) along with school buses and delivery vehicles. The average weight of these vehicles coupled with tire pressure and configuration today compared to those from a few decades ago has increased drastically.

- The upper black diagonal line identifies segments that have a high ratio of load associated distresses compared to their PCI score. These segments are classified as weak.
- The lower black diagonal line identifies segments that have a low ratio of load associated distresses compared to their PCI score and are classified as strong.
- Segments that fall between the two lines are assigned a moderate pavement strength.

The sum of the Load-Associated Distress deducts (LADD) is also used to qualify the appropriate rehabilitation strategy selection in addition to the overall pavement condition score.

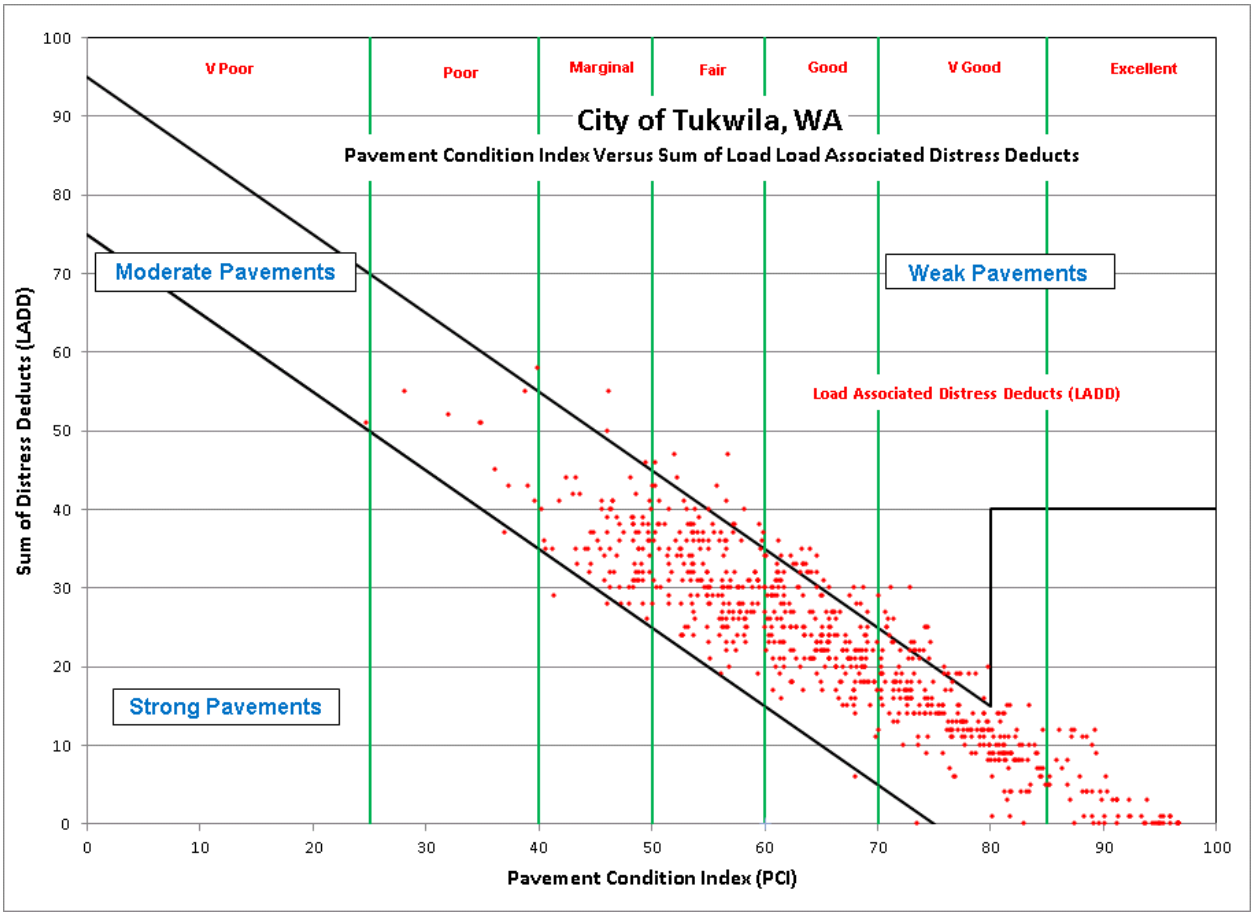

Figure 14 – Pavement Condition Index versus Sum of Distress Deducts

5.0 REHABILITATION PLAN AND BUDGET DEVELOPMENT

5.1 KEY ANALYSIS SET POINTS AND PAVEMENT PERFORMANCE CURVES

Pavement management analysis requires user inputs in order to complete its condition forecasting and prioritization. A series of operating parameters were developed in order to create an efficient program that is tailored to the City's needs.

Some of the highlights include:

- The pavement performance curves that are used to predict future pavement condition. Asphalt streets are classified as weak, moderate, or strong, and then assigned the appropriate pavement performance curve based on their functional classification to use in the analysis. The concept of load associated distresses does not apply to concrete streets.
- The shape of performance curves reflect the concept of deferred maintenance and salvage life. Instead of dropping to an absolute PCI value of 0 after 40 years of service, the curves are designed to become asymptotic to the age axis and have a whole life of approximately 50 to 60 years depending on pavement type. This indicates the notion that once a street deteriorates past a specific threshold – about a PCI of 20, age becomes less important in rehab selection.
- Priority ranking analysis uses prioritization for rehabilitation candidate selection. It is designed to capture as many segments in their need year based on the incremental cost of deferral. The higher the functional classification of a street, the higher priority a segment is given.

Rehabilitation Strategies and Unit Rates

The rehab strategies and unit rates used in the pavement analysis can be found on the following page. Some important parameters include:

- **Rehab Code and Activity** – The assigned identifier and name to each rehabilitation strategy. The term "RR" refers to "Remove and Replace", otherwise known as Structural Patching. When this term is present, additional funds have been assigned to the strategy to allow for an increased amount of preparation work and patching. The relative terms of thin, moderate and thick are used to describe the overlay thickness. This is to facilitate consistency in the naming convention, but does not imply the same material thickness has to be used for each functional classification.

  The recommended rehab activities for any given PCI range may vary due to pavement strength and functional classification. For example, an arterial between a PCI of 50 to 60 may receive a thin to moderate overlay, while a local access road may only receive a chip seal or thin overlay.

- **Unit Rates** – The rehab costs are presented on a per square yard basis for each pavement type, functional class, and rehabilitation activity combination. The rates were developed using typical national averages for similar activities and adjusted for Tukwila's location and unique conditions. An additional burden to all costs was also added to cover City overheads, design and engineering and inspection. Costs for peripheral concrete rehab (valley gutters, inlets, approaches, etc.) have not been included in the analysis.

The unit rates are reflected in the network value, final budgets, and average cost/mile for doing work in Tukwila.

City of Tukwila, WA
Rehabilitation Strategies and Unit Rates

Pavetype	Rehab Code	Rehab Activity	Rehab Group 1 Min PCI	Rehab Group 1 Critical PCI (Need Year)	Rehab Group 1 Max PCI	Rehab Group 1 Base Unit Rate ($/yd2)	Principal Arterial Unit Rate ($/yd2)	Minor Arterial Unit Rate ($/yd2)	Collector Unit Rate ($/yd2)	Local Unit Rate ($/yd2)
Asphalt	10	Slurry Seal / Seal Coat	80	82	85	4.50	5.00	4.80	4.70	4.60
Asphalt	20	MicroSurface / Chip Seal	70	73	80	6.70	7.25	7.25	7.00	6.75
Asphalt	23	MicroSurface / Chip Seal + Strctrl Ptch	70	73	80		8.25	8.00	7.75	7.75
Asphalt	26	MicroSurface / Chip Seal + Strctrl Ptch	60	63	70		9.00	8.75	8.50	8.50
Asphalt	30	Edge Mill + Thin Overlay (1.5 - 2.0)	60	63	70	22.25	24.50	24.00	23.25	22.75
Asphalt	33	Edge Mill + Thin Overlay (1.5 - 2.0) + Strctrl Ptch	60	63	70		26.50	25.75	25.25	24.50
Asphalt	36	Edge Mill + Thin Overlay (1.5 - 2.0) + Strctrl Ptch	50	54	60		28.25	27.75	27.00	26.50
Asphalt	40	EM/FWM + Moderate Overlay (2.0 - 3.0)	50	54	60	29.75	34.50	33.00	32.00	31.00
Asphalt	43	EM/FWM + Moderate Overlay (2.0 - 3.0) + Strctrl Ptch	50	54	60		36.50	35.00	34.00	32.50
Asphalt	46	EM/FWM + Moderate Overlay (2.0 - 3.0) + Strctrl Ptch	40	44	50		38.50	37.00	36.00	34.50
Asphalt	50	FWM + Thick Overlay (> 2.0 - 3.0)	40	44	50	37.50	45.50	43.50	41.50	39.50
Asphalt	53	FWM + Thick Overlay (> 2.0 - 3.0) + Strctrl Ptch	40	44	50		48.00	45.50	43.50	41.50
Asphalt	56	FWM + Thick Overlay (> 2.0 - 3.0) + Strctrl Ptch	25	30	40		50.00	48.00	46.00	43.50
Asphalt	60	Surf Recon + Base Rehab / FWM + Strctrl Ptch + Olay	25	30	40	62.50	75.50	72.00	69.00	65.50
Composite	65	Surf Recon + PCC to Base/FWM + Strctrl Ptch + Olay	25	30	40	66.50	80.50	77.00	73.50	70.00
Asphalt	70	ACP Full Depth Reconstruction	0	15	25	93.00	102.50	100.00	97.50	95.50
Composite	75	Full Depth Recon + PCC to Base	0	15	25	101.00	111.00	109.00	106.00	104.00
Concrete	510	PCC Jnt Rehab & Crk Seal	80	82	100	8.75	9.75	9.50	9.25	9.00
Concrete	520	PCC Localized Rehab	70	73	80	18.75	21.75	21.00	20.25	19.50
Concrete	523	PCC Localized Rehab + Grind	70	73	80		21.75	21.00	20.25	19.50
Concrete	530	PCC Slight Pnl Rplcmnt (<10%)	60	63	70	38.50	46.50	44.50	42.50	40.50
Concrete	533	PCC Slight Pnl Rplcmnt (<10%) + Grind	60	63	70		46.50	44.50	42.50	40.50
Concrete	540	PCC Moderate Pnl Rplcmnt (< 20%)	50	54	60	58.50	74.00	70.00	66.00	62.00
Concrete	543	PCC Moderate Pnl Rplcmnt (< 20%) + Grind	50	54	60		74.00	70.00	66.00	62.00
Concrete	550	PCC Extensive Pnl Rplcmnt (<33%)	40	44	50	81.00	108.00	100.50	94.00	87.00
Concrete	553	PCC Extensive Pnl Rplcmnt (<33%) + Grind	40	44	50		108.00	100.50	94.00	87.00
Concrete	560	PCC Partial Reconstruction	25	30	40	109.00	138.00	131.00	123.00	116.00
Concrete	570	PCC Full Depth Reconstruction	0	15	25	164.00	218.00	204.00	190.00	177.00

Figure 15 – Rehab rates by Functional Class

**Unit rates vary slightly between functional classes*

Min PCI, Critical PCI, and Max PCI – These define the Pavement Condition Index (PCI) range applicable to the rehab selection. The Critical PCI defines when a segment is in its need year and is deemed to be critical, otherwise if deferred, the street declines in PCI past the point which the rehabilitation is no longer appropriate. Generally the Critical PCI falls 2 to 4 points higher than the minimum PCI applicable for each rehab activity.

Figure 16 graphically presents the application of pavement rehabilitations for asphalt streets by PCI. The Rehab numbers are simply placeholders that separate each rehabilitation project identified on the chart above. For example, Rehab 56 is a Thick Overlay + Structural Patch.

Unit rates increase slightly between functional classes to reflect increase costs in pavement thickness, traffic control, and striping.

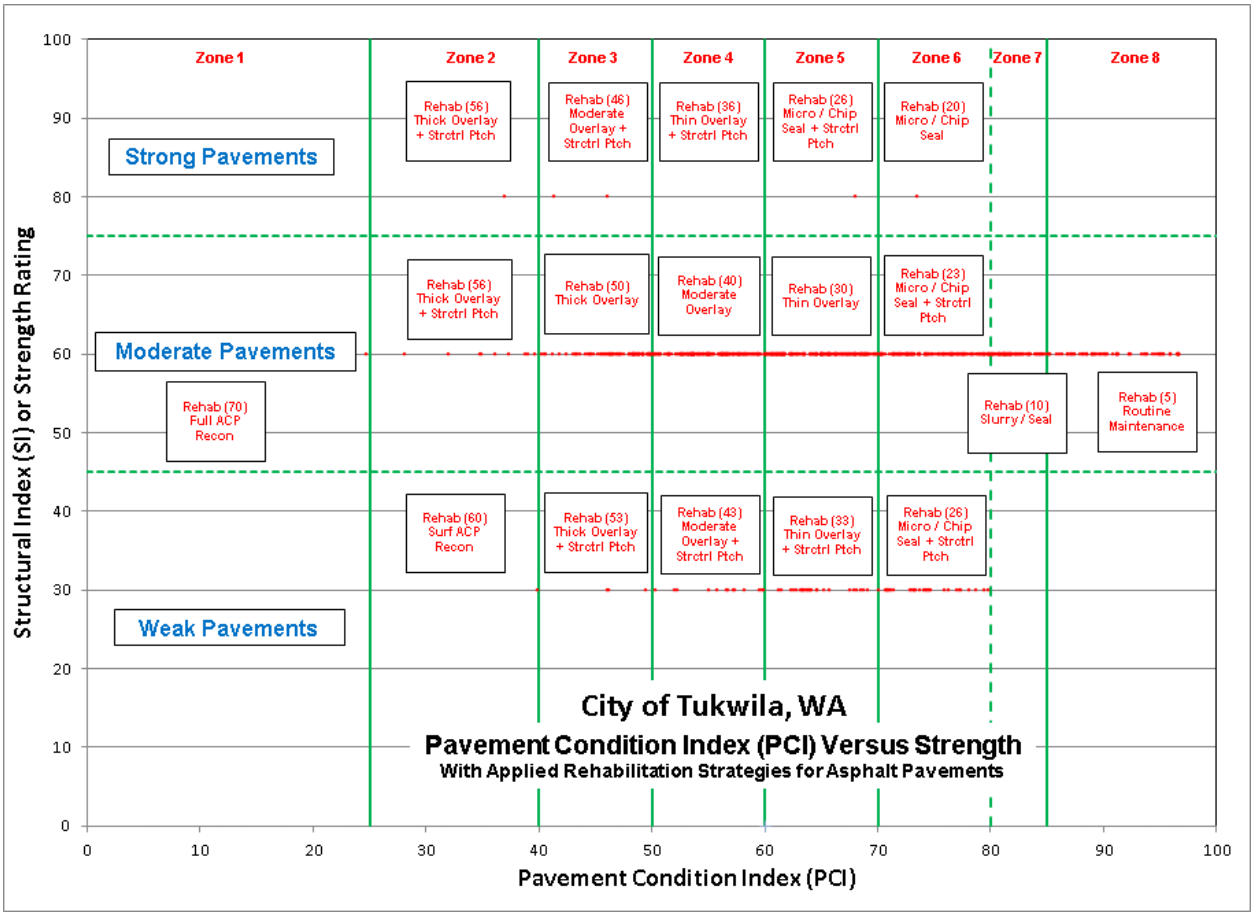

Figure 16 – Asphalt (ACP) Rehabilitation Strategies

Selection and Prioritization of Rehab Candidates

The City's pavement management program incorporates a series of user defined values to prioritize and select the street segments for rehabilitation. The rehab selection order is not worst first, but rather designed to capture as many segments in their need year based on the incremental cost of rehab deferral. A Street is considered to be in its need year when it has reached its maximum service life and any further deferral would require a heavier and more costly rehabilitation. The rehab program has been designed to maximize the increased service life for each rehabilitation dollar spent on a segment.

Other factors included in the prioritization process focus on:

- **Need Year** – streets are only selected when they have expended their service life and are optimal for rehab selection.

- **Functional Classification** – generally priority is given to higher functional classifications as they provide greater benefits to a larger group of users
- **Pavement Strength** – weaker streets are prioritized higher than stronger ones as they deteriorate faster.
- **Area** – a very slight increase in priority is given to larger projects over smaller ones.

The net result is a program that favors thick overlays, followed by partial reconstruction projects then full reconstruction projects (more for safety reasons than cost-benefit). These are then followed by surface treatments and lastly by moderate to thin overlays.

The programmed deterioration curves illustrated in **Figure 17** are designed to integrate the pavement condition distribution performance curves for the network, with the applied rehabilitation strategies and their expected life cycle. Different color performance curves are meant to represent the full suite of curves assigned to segments based upon their functional class, pavement type, and strength.

It is important to recognize that even though all streets fall into specific rating categories and their respective rehabilitation strategies, it is not until a street falls to within a few points of the lower end of the range that it will become a critical need selected for rehabilitation.

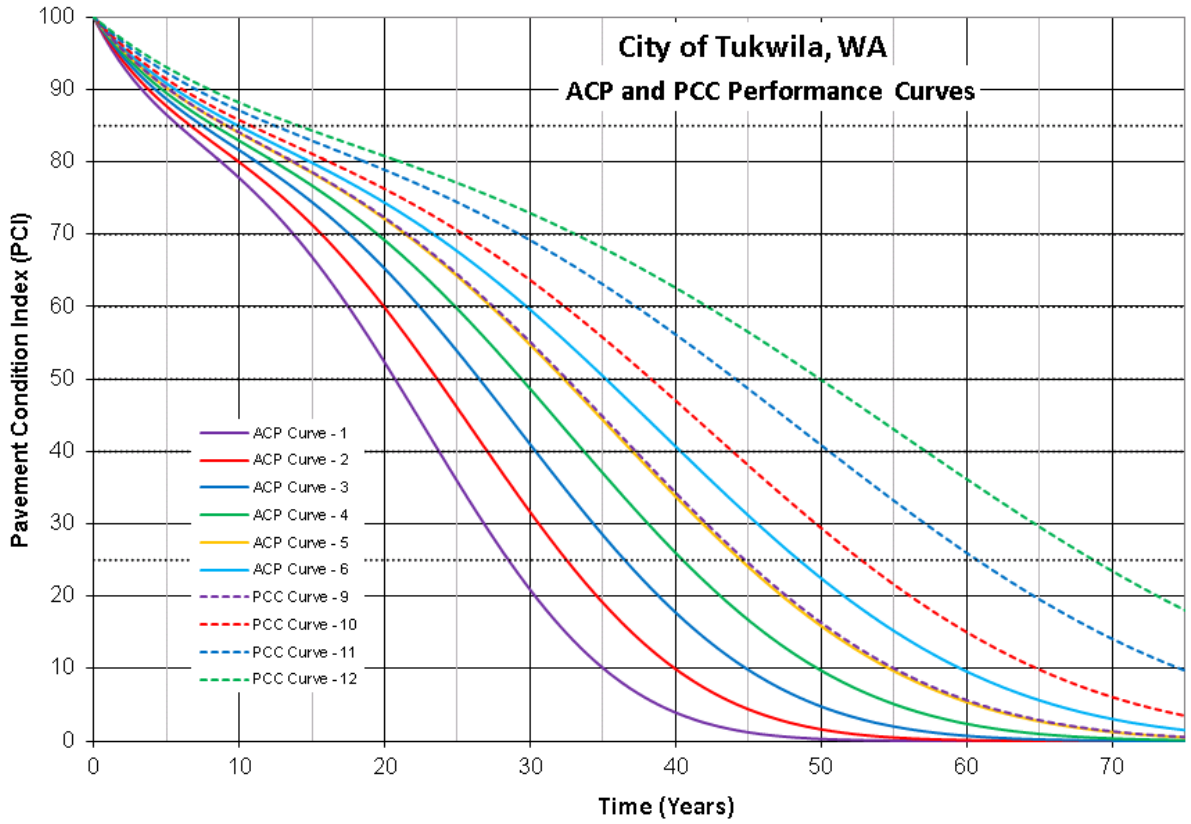

Figure 17 - Performance Curves

5.2 FIX ALL AND ANNUAL ESTIMATES

Three different approaches may be taken to identify and confirm the amount of funds the City needs to set aside each year to maintain the roadway network at its current condition. All three are completed externally to the pavement management system and are simply used to validate the final results.

Option 1 – Estimated Life Cycle Cost Based on Network Value

An approximate value for the annual street maintenance budget may be quickly determined by taking the total value of Tukwila's roadway network, estimated at $145M, and dividing that by the ultimate life of a roadway – approximated to be 50 years. By this method, the annual budget is estimated at $2,900,000.

Please note, the 50 year lifespan of the roadway is the theoretical life of the roadway surface from construction, until the point at which there not usable surface remaining, it is not simply the lifespan of the pavement surface until the next overlay.

Rehabilitation Estimate Based on Network Valuation

Pavement Type	Network Valuation ($)	Ultimate Life Span (yrs)	Life Cycle Cost ($/Yr)
Asphalt Network	145,009,000	50	2,900,000
City of Tukwila, WA Network Totals:	**145,009,000**		**2,900,000**

Option 2 – Estimated Life Cycle Cost Based on Current Condition

A second method to validate the annual budget is to identify the average network PCI and associated rehabilitation requirements, and then estimate the number of miles required to be rehabilitated each year based on a typical life cycle for that rehabilitation activity. For Tukwila, the average PCI for asphalt roads is 66, which places the Tukwila asphalt network in the Edge Mill + Thin Overlay, at an average cost of $23.55/yd^2. Based on this estimate the City needs to spend approximately $2,107,337/year to maintain the current condition average.

Rehabilitation Estimate Based on Network Average Condition

Pavement Type	Pavement Condition Index (PCI)	Rehab Code	Rehab Activity	Average Rehab Life Cycle (Yrs)	Miles to do Each Year	Blended Unit Rate ($/yd2)	Average Cost per Mile ($/)	Life Cycle Cost ($/Yr)
Asphalt Network	66	30	Edge Mill + Thin Overlay (1.5 - 2.0)	18	4.5	23.55	471,300	2,107,337
City of Tukwila, WA Network Totals:								**2,107,337**

Option 3 – Estimated Life Cycle Cost Based on Network Deficiency

The third methodology to confirm the required amount of annual funding is to identify the current network deficiency, that is the amount required to rehabilitate all streets in the network assuming unlimited funding, and then divide by the typical life cycle of each rehabilitation activity. This is referred to as the Fix All Estimate and Life Cycle Cost. The rehab strategies listed in the table are generic in nature and not necessarily the final set that was applied to Tukwila. For Tukwila, the Fix All Estimate for the network deficiency is approximately $34M and the Life Cycle Cost is $1.97M/year, broken down as follows:

City of Tukwila, WA

Rehabilitation Estimate Based on Current Network Deficiency and Life Cycle Cost

Rehab Code	Rehab Activity	Network Total ($)	% of Total	Principal Arterial	Minor Arterial	Collector	Local	Life Cycle (Yrs)	Life Cycle Cost ($/Yr)
10	Slurry Seal / Seal Coat	761,000	2.2	175,700	427,280	0	157,980	5	152,200
20	MicroSurface / Chip Seal	0	0.0	0	0	0	0	8	0
23	MicroSurface / Chip Seal + Strctrl Ptch	2,895,100	8.5	386,910	540,340	373,820	1,594,040	8	361,900
26	MicroSurface / Chip Seal + Strctrl Ptch	518,300	1.5	518,260	0	0	0	8	64,800
30	Edge Mill + Thin Overlay (1.5 - 2.0)	7,453,000	21.8	674,460	1,989,830	1,796,670	2,992,060	18	414,100
33	Edge Mill + Thin Overlay (1.5 - 2.0) + Strctrl Ptch	3,055,400	9.0	2,407,990	340,720	186,010	120,660	18	169,700
36	Edge Mill + Thin Overlay (1.5 - 2.0) + Strctrl Ptch	83,900	0.2	0	0	0	83,930	18	4,700
40	EM/FWM + Moderate Overlay (2.0 - 3.0)	11,757,800	34.5	2,388,090	2,004,540	3,313,380	4,051,790	23	511,200
43	EM/FWM + Moderate Overlay (2.0 - 3.0) + Strctrl Ptch	2,279,400	6.7	1,699,250	580,140	0	0	23	99,100
50	FWM + Thick Overlay (> 2.0 - 3.0)	3,970,600	11.6	797,930	612,080	0	2,560,560	28	141,800
53	FWM + Thick Overlay (> 2.0 - 3.0) + Strctrl Ptch	1,105,400	3.2	1,105,440	0	0	0	28	39,500
56	FWM + Thick Overlay (> 2.0 - 3.0) + Strctrl Ptch	234,800	0.7	0	0	0	234,770	28	8,400
	City of Tukwila, WA Network Totals:	**34,114,700**		**10,154,030**	**6,494,930**	**5,669,880**	**11,795,790**		**1,967,400**

5.3 NETWORK BUDGET ANALYSIS MODELS

An analysis containing a total of 10 profile budget runs plus a Do Nothing options was prepared for Tukwila.

The analysis results are summarized below:

- **Do Nothing** (illustrated in Figure 20) – This option identifies the effect of spending no capital for 5 years. After 5 years, this scenario results in a network average PCI drop from a 66 to a 54 and a dramatic increase in backlog to 17%
- **Client Budget** (Green Line) – this represents the City's current annual budget of $1.05M annually dedicated to pavement preservation and rehabilitation. This level of funding will result in a network average PCI score of 59 and a backlog increase to 12%.
- **Steady State PCI** – this is simply the funds required to maintain the current network average PCI at a 66. The annual budget required to do so is on the order of $2.42M annually, however backlog (Very Poor & Poor roadways) continues to climb to 6%.
- **Backlog Control Budget** – A budget designed to maintain the City's current backlog at 5%.

The results of the analysis are summarized in **Figure 18** below. The X-axis highlights the annual budget, while the Y-axis plots the 5 Year Post Rehab Network Average PCI value. The diagonal blue line is the results of the pavement analysis (the Tukwila model profile).

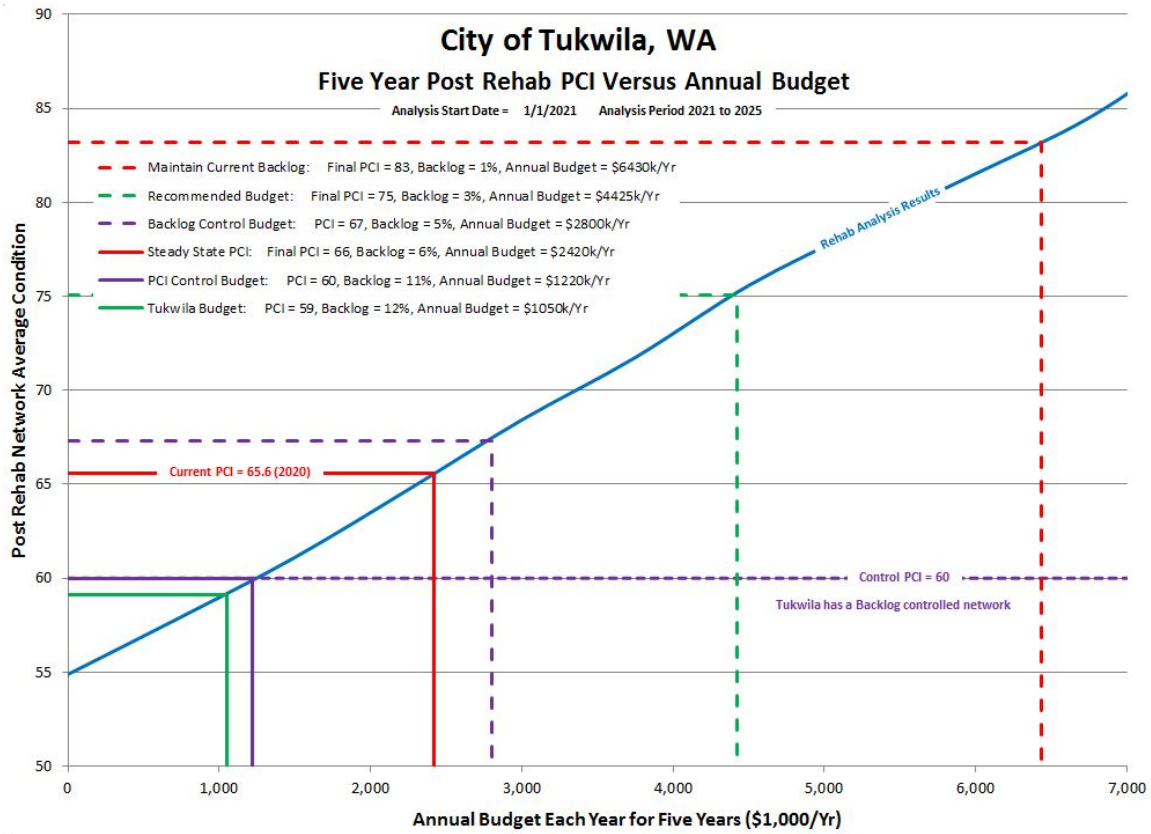

Figure 18 – 5 Year Post Rehab Network PCI Analysis Results

Figure 19 presents the resultant network backlog against annual budget. Similar to Figure 18, but instead of plotting the average PCI score, the blue diagonal line represents the total backlog after 5 years.

The lower the backlog the better, with a maximum of 12% recommended

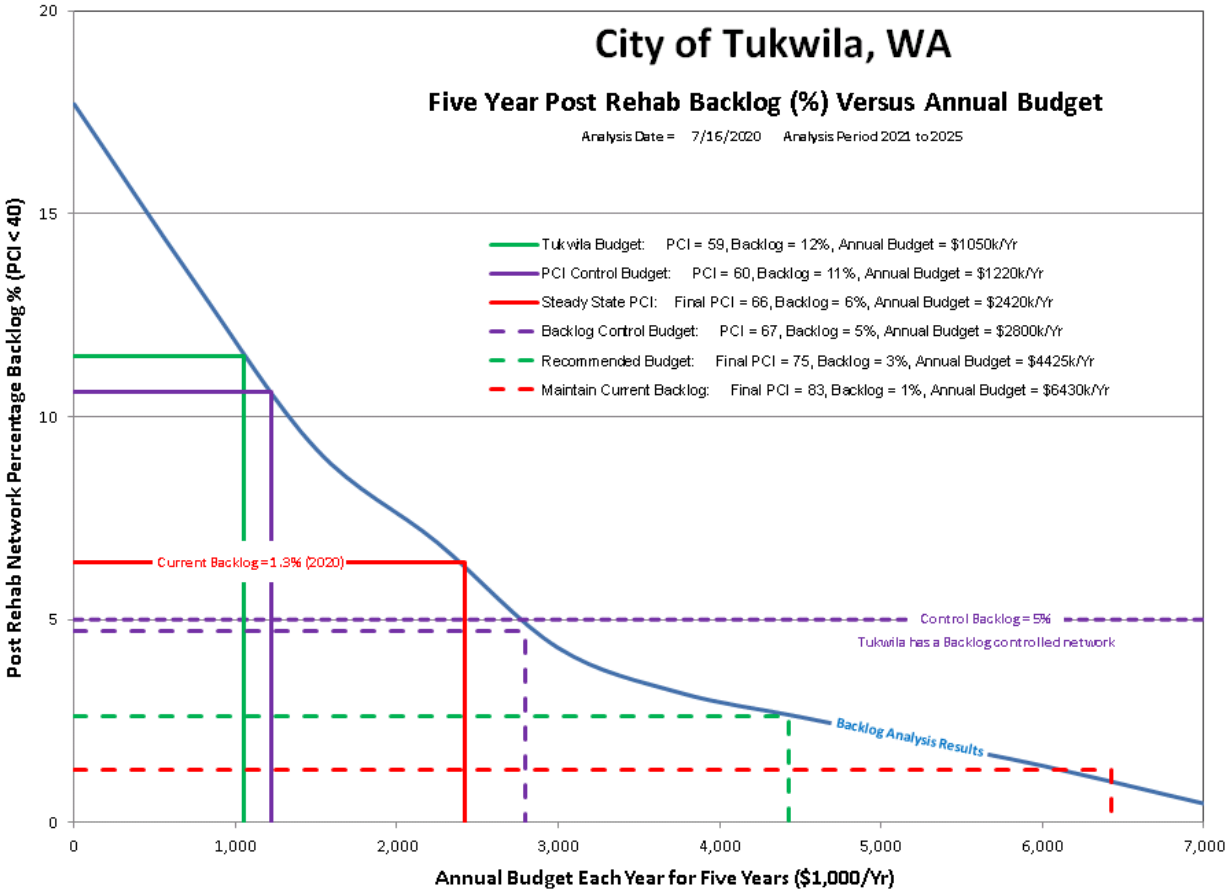

Figure 19 – 5 Year Post Rehab Network Backlog Results

Figure 20 presents the analysis results on an annual basis. This shows that if the budget falls below $2.42M/year (Steady State Budget), over time the overall condition of the roads will deteriorate as backlog continues to grow.

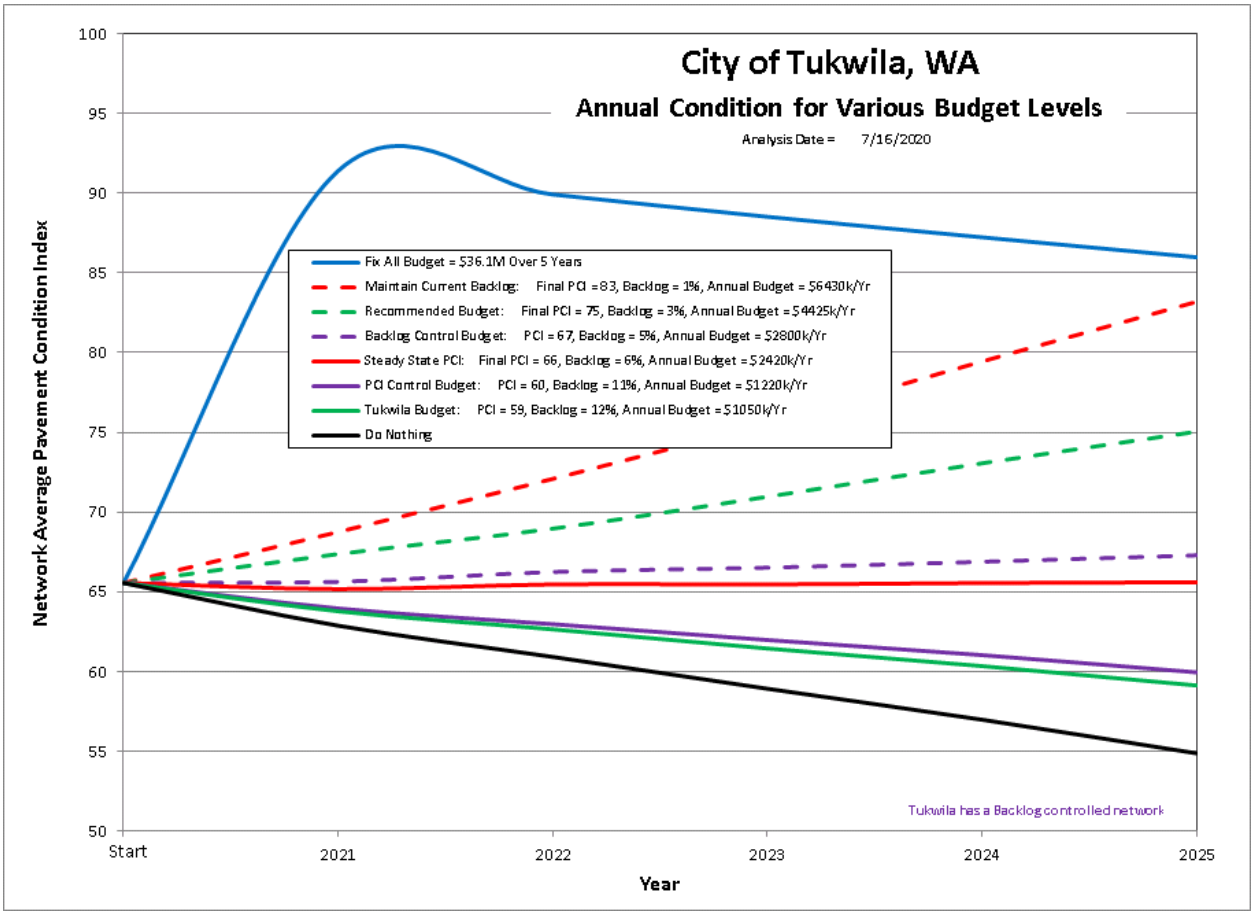

Figure 20– 5 Year Annual PCI

5.4 POST REHABILITATION CONDITION

The following figure (**Figure 21**) compares the current network condition distribution (red) against what the 5-year post rehabilitation distribution would be at with a budget of $1.05M/year (blue) As can be seen in the plot, the Tukwila budget will reduce the overall network's PCI average and increase the amount of roads rated as Marginal and Poor.

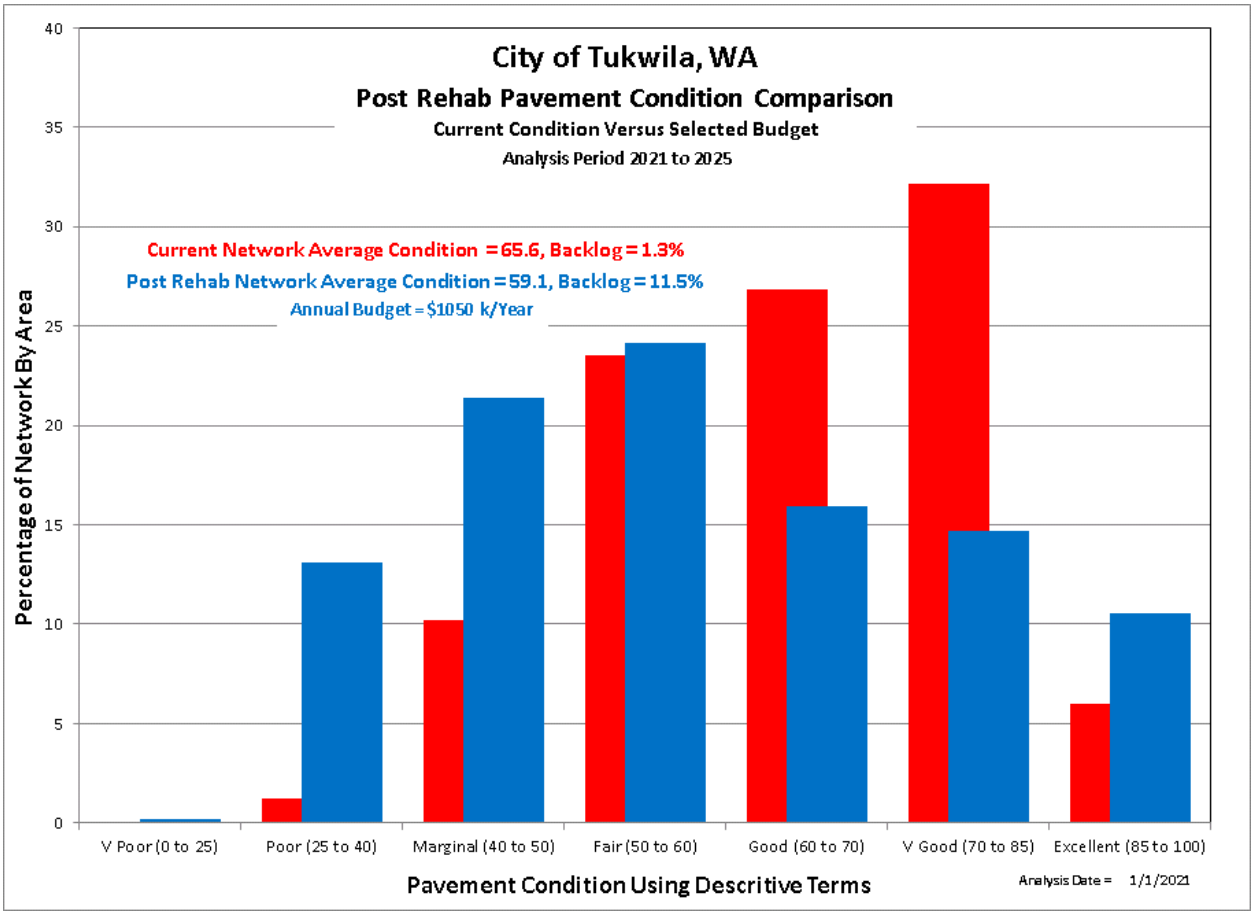

Figure 21 – Five-Year Post Rehabilitation Condition Distribution

Three metrics are used to evaluate the quality of a roadway network, they are:

Average Condition – should be between 60 and 65 at a minimum
Percentage of Backlog – target 12%, should be less than 15%, must be less than 20%
Percentage of Streets Rated as Excellent – should be greater than 15%

Figures 22 and 23 present the current Tukwila recommended budget network rehabilitation plan by year and activity. Electronic versions of these maps are appended to this report.

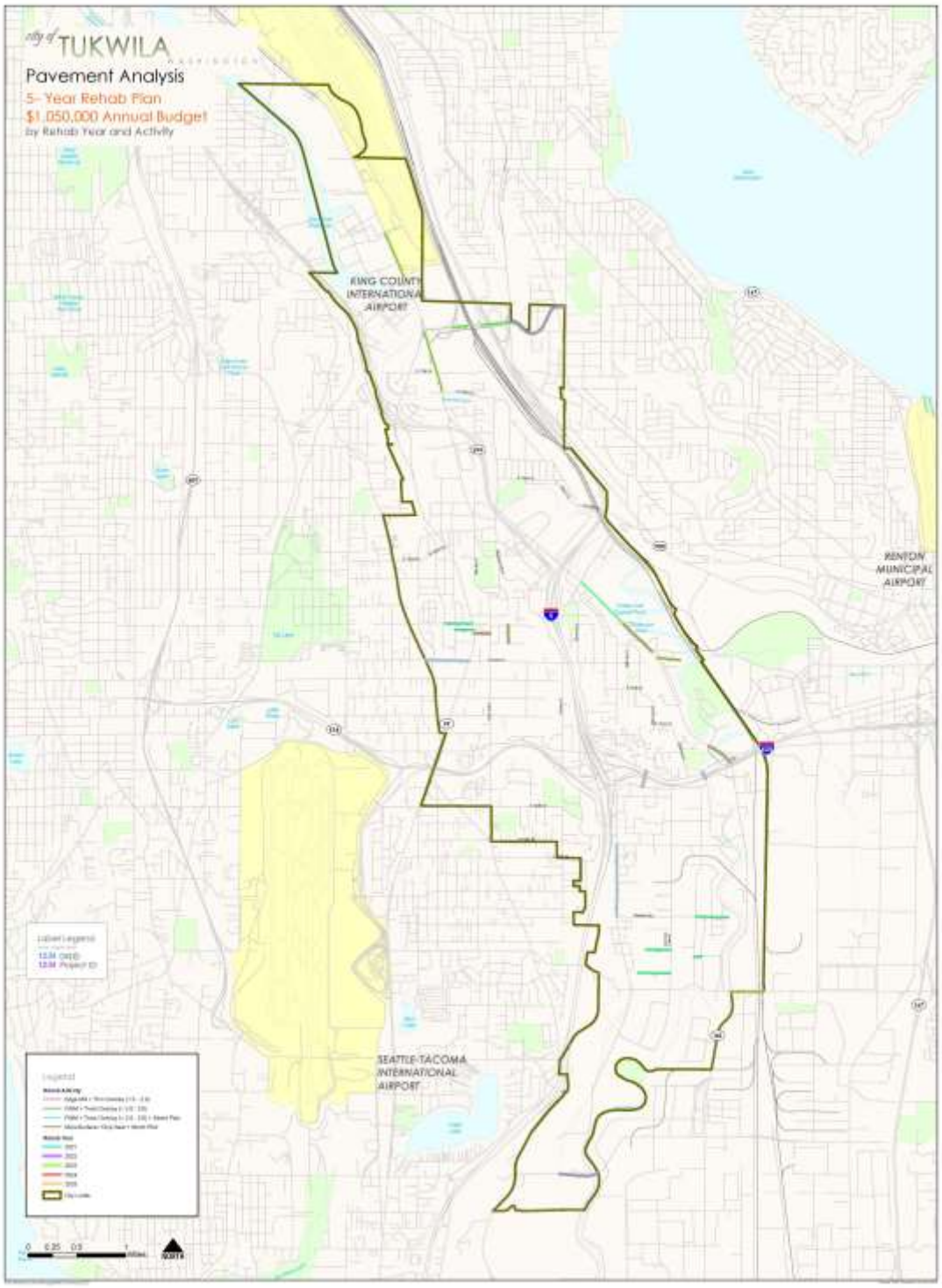

Figure 22 – $1.05M/Year Rehabilitation Plan by Activity and Year

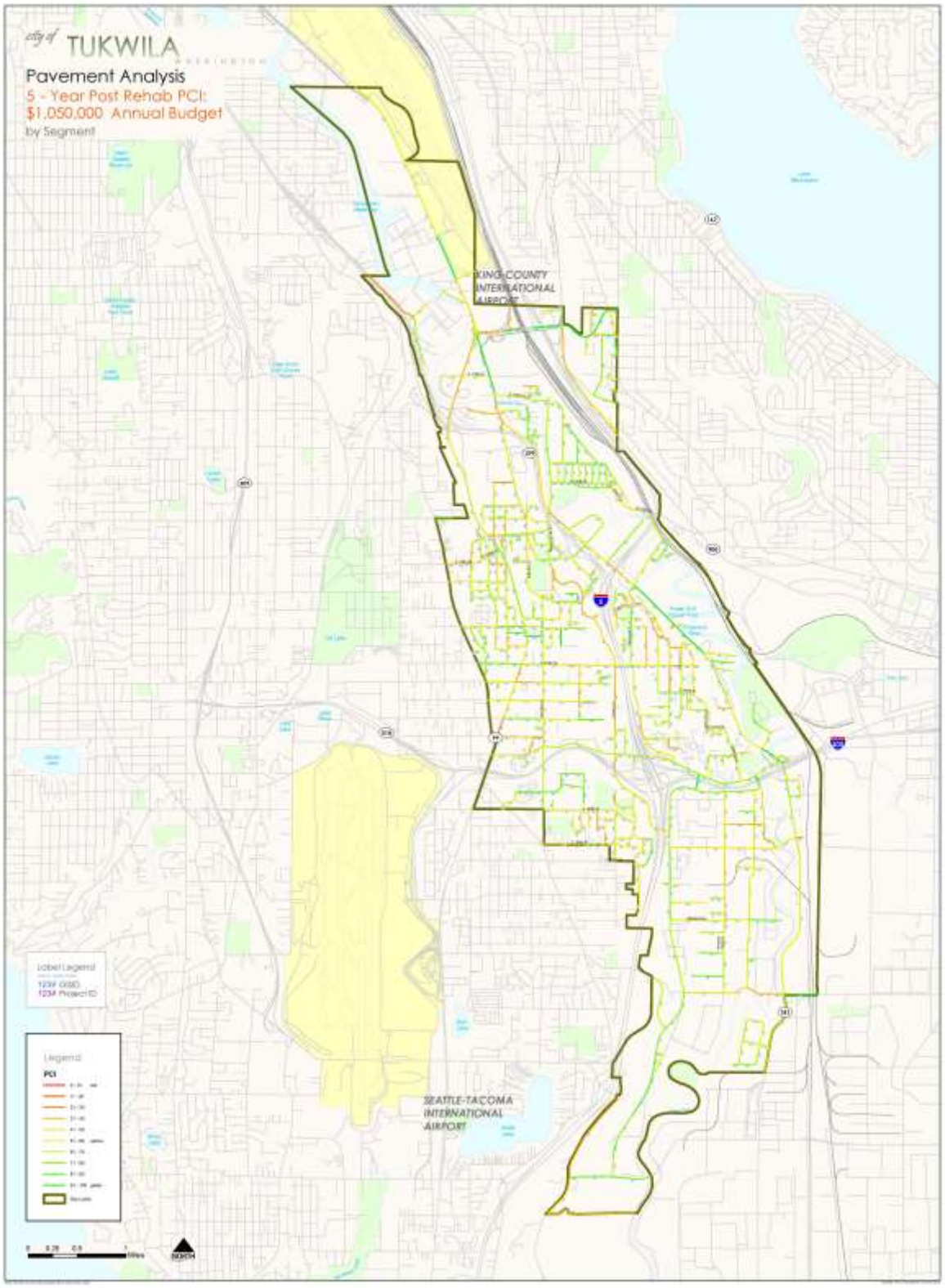

Figure 23 – $1.05M/Year Post Rehabilitation PCI by Segment

5.5 TRUE COST OF UNDERFUNDING OF A ROADWAY NETWORK

Funding of roadway rehabilitation is an exercise in identifying the balance between available funding and the desired level of service that is right for each agency. There are no hard rules for what is the definitive level of funding as this is a decision for local elected officials, based on their priorities and practices.

However, the true costs of over and underfunding must be presented in order to provide decision makers with all the information available to base the decisions upon. Tukwila has a considerable investment in their paved roadway network with a combined replacement value (just for the streets, not right of way) exceeding $36M. Spreading this cost over a 50 year period (the expected ultimate life of a roadway) means that an annual investment on the order of $2.42M per year would be required – not including the cost of maintenance, deterioration ,repair curbing, drainage, tree roots, sidewalks or ADA ramps.

Government Accounting Standards Board Statement 34 requires that agencies who collect taxes (local, business, property or gas taxes) for the purpose of maintaining long term infrastructure assets (such as roads) be good stewards of those assets by either accounting for them financially on the City's balance sheet, or implement a methodology to manage and fund them to a locally defined level of service.

The condition of a roadway network may be equated to equity in a depreciating asset. Regular payments to that asset must be made in order to maintain the equity at a constant level. Should those payments fall short, the equity must eventually be replaced through a large influx of capital in order to make the investment whole again. Roadway networks are no different. Long term underfunding of rehabilitation and maintenance is the direct equivalent of removing equity from an asset – eventually it must be repaid through total reconstruction. The following table compares the real cost of the various budgets against the Do Nothing and Steady State options.

City of Tukwila, WA
Equity Removal Summary

Starting PCI:	66
Five Year Post Rehab Fix All PCI:	86
Fix All PCI Increase:	20
Five Year Fix All Total Cost ($):	36,142,000
Cost Per PCI Point (Total Cost / PCI Increase, $/pt)	1,770,000

Equity Removal Based On PCI Restoration					**For PCI Controlled Agencies**
Model:	**Do Nothing**	**$750k Annual**	**$1500k Annual**	**$2250k Annual**	**Steady State**
Annual Budget ($k/Year):	0	750	1500	2250	2420
Starting PCI	66	66	66	66	66
Final PCI	55	58	61	65	66
PCI Drop:	11	8	4	1	0
Cost to Replace Equity (PCI Drop X $/Pt, $):	18,894,000	13,476,000	7,881,000	1,489,000	0
5 Year Budget Expenditure ($):	0	3,750,000	7,500,000	11,250,000	12,100,000
Total 5 Year Cost ($):	18,894,000	17,226,000	15,381,000	12,739,000	12,100,000
Cost Over Steady State Budget ($):	6,794,000	5,126,000	3,281,000	639,000	0
Additional Annual Cost Over Steady State ($/year):	**1,358,800**	**1,025,200**	**656,200**	**127,800**	**0**

5.6 NETWORK RECOMMENDATIONS AND COMMENTS

The following recommendations are presented to Tukwila as an output from the pavement analysis, and must be read in conjunction with the attached reports.

1. Tukwila should adopt a policy statement to maintain PCI at or above a 60 while keeping backlog below 15%.

   An annual budget of $1.05M (dedicated to pavement rehabilitation) will achieve a network average PCI of 59 and backlog of 12%.

   An annual budget of $2.42M (dedicated to pavement rehabilitation) will achieve a network average PCI of 66 and backlog of 6%.

2. The full suite of proposed rehabilitation strategies and unit rates should be reviewed annually as these can have considerable effects on the final program.

3. No allowance has been made for network growth. As the City expands or increases the amount of paved roads, increased budgets will be required.

4. No allowance has been made for routine maintenance activities such as asphalt crack sealing, pothole filling, sweeping, striping or patching within the budget runs and analysis. These costs are assumed to be outside the pavement management costs.

5. The City should resurvey their streets every few years to update the condition data and rehabilitation program.

Appendix A

Street Inventory and Condition Summary

City of Tukwila, WA

Street Inventory and Condition Summary - Sorted by Street Name

GISID	On Street	From Street	To Street	FunCL	Pavement Width (ft)	Pavement Length (ft)	Add Area (yd2)	Pavement Area (yd2)	Condition Summary: Surface Distress Index (SDI)	Roughness Index (RI)	Structural Index (SI)	Pavement Cndtn Index (PCI)	Strength Rating	Condition Rating	Load Assoc Distress Deducts (LADD)	Non-Load Distress Deducts (NLAD)	Current Segment PCI (CPCI)
2161	102nd St	27th Ave S	DS@644E 27th Ave S	Local	19	644	68	1,428	61	54	60	**59**	Mod	Fair	30	9	**58**
1457	104th Pl	WEST END	Martin L King Jr Way S	Local	19	751	79	1,665	77	57	60	**70**	Mod	V Good	16	7	**70**
1013	104th Pl	47th Ave S	DS@188E 47th Ave S	Local	20	188	21	439	84	65	60	**77**	Mod	V Good	15	1	**77**
1425	104th St	27th Ave S	East Marginal Way S	Local	20	977	109	2,280	54	57	60	**55**	Mod	Fair	36	10	**54**
1118	107th St	S Ryan Way	EAST END	Local	20	302	34	705	43	45	60	**43**	Mod	Marginal	35	23	**43**
1278	107th St	49th Ave S	Beacon Ave S	Local	22	471	58	1,209	92	77	60	**87**	Mod	Excellent	5	3	**86**
1119	107th St	Beacon Ave S	51st Ave S	Local	22	130	16	334	82	63	60	**76**	Mod	V Good	14	5	**75**
1940	109th St	50th Ave S	Beacon Ave S	Local	22	217	27	557	89	70	60	**83**	Mod	V Good	4	6	**82**
1285	112th St	WEST END	Tukwila Intl Blvd	Local	22	778	95	1,997	60	68	60	**62**	Mod	Good	27	14	**62**
1286	112th St	Tukwila Intl Blvd	East Marginal Way S	Collector	35	995	193	4,063	71	64	60	**69**	Mod	Good	22	7	**68**
1284	112th St	50th Ave S	51st Ave S	Local	20	294	33	686	74	53	60	**67**	Mod	Good	22	4	**66**
1039	113th St	WEST END	41st Ave S	Local	20	475	53	1,108	50	31	60	**44**	Mod	Marginal	42	8	**43**
1988	113th St	WEST END	51st Ave S	Local	20	345	38	805	72	50	60	**65**	Mod	Good	25	2	**65**
1444	114th St	40th Ave S	41st Ave S	Local	22	219	27	562	72	50	60	**65**	Mod	Good	17	10	**65**
1442	114th St	41st Ave S	EAST END	Local	22	148	18	380	93	81	60	**89**	Mod	Excellent	1	6	**89**
1441	114th St	49th Ave S	51st Ave S	Local	22	918	112	2,356	91	74	60	**85**	Mod	Excellent	5	4	**85**
1057	115th St	East Marginal Way S	40th Ave S	Collector	33	1,096	201	4,220	66	68	60	**67**	Mod	Good	27	7	**66**
1058	115th St	40th Ave S	42nd Ave S	Collector	32	764	136	2,852	79	72	60	**77**	Mod	V Good	18	3	**76**
1059	115th St	42nd Ave S	NE END	Local	19	209	22	463	73	51	60	**66**	Mod	Good	23	4	**65**
1338	116th St	WEST END	East Marginal Way S	Local	19	1,114	118	2,469	49	53	60	**51**	Mod	Fair	35	15	**50**
2100	116th St	East Marginal Way S	35th Ln S	Local	19	226	24	501	68	54	60	**64**	Mod	Good	25	7	**63**
2102	116th St	35th Ln S	39th Ave S	Local	19	488	52	1,082	75	70	30	**73**	Weak	V Good	22	3	**73**
1628	116th St	43rd Pl S	42nd Ave S	Local	19	363	38	805	69	47	60	**61**	Mod	Good	19	12	**61**
1596	117th St	39th Ave S	40th Ave S	Local	20	315	35	735	87	68	60	**81**	Mod	V Good	9	4	**80**
2098	118th St	44th Ave S	44th Pl S	Local	20	94	10	219	90	70	60	**83**	Mod	V Good	0	11	**83**
1690	118th St	44th Pl S	EAST END	Local	20	201	22	469	54	24	60	**44**	Mod	Marginal	35	11	**44**
1360	119th St	40th Ave S	40th Pl S	Local	20	240	27	560	86	67	60	**80**	Mod	V Good	8	5	**79**
1370	119th St	40th Pl S	EAST END	Local	21	224	26	549	88	69	60	**82**	Mod	V Good	1	11	**81**
1229	122nd Ln	50th Ave S	51st Pl S	Local	21	338	39	828	84	65	60	**78**	Mod	V Good	12	5	**77**
1440	122nd St	42nd Ave S	43rd Ave S	Local	21	334	39	818	66	53	60	**62**	Mod	Good	28	6	**61**
1432	122nd St	43rd Ave S	44th Ave S	Local	21	152	18	372	60	58	60	**59**	Mod	Fair	31	9	**59**
1430	122nd St	44th Ave S	44th Ave S	Local	22	98	12	252	74	57	60	**68**	Mod	Good	21	5	**67**
1435	122nd St	44th Ave S	45th Ave S	Local	22	252	31	647	90	71	60	**83**	Mod	V Good	8	3	**83**
1061	122nd St	45th Ave S	46th Ave S	Local	22	190	23	488	89	70	60	**82**	Mod	V Good	8	4	**82**
1671	122nd St	46th Ave S	46th Ave S	Local	22	54	7	139	69	60	60	**66**	Mod	Good	21	10	**65**
1431	122nd St	46th Ave S	47th Ave S	Local	22	248	30	637	84	74	60	**81**	Mod	V Good	11	4	**81**
1434	122nd St	47th Ave S	48th Ave S	Local	19	255	27	565	86	75	60	**82**	Mod	V Good	12	2	**82**
1436	122nd St	48th Ave S	44th Pl S	Local	19	187	20	415	97	89	60	**94**	Mod	Excellent	0	3	**94**
1433	122nd St	44th Pl S	49th Ave S	Local	19	63	7	140	100	90	60	**97**	Mod	Excellent	0	0	**96**
1106	122nd St	49th Ave S	51st Pl S	Local	19	130	14	288	93	80	60	**89**	Mod	Excellent	4	3	**88**
1417	124th St	35th Ave S	East Marginal Way S	Local	19	718	76	1,592	38	46	60	**41**	Mod	Marginal	35	17	**40**
1502	124th St	42nd Ave S	43rd Ave S	Collector	35	273	53	1,115	91	72	60	**84**	Mod	V Good	6	3	**84**
1505	124th St	43rd Ave S	44th Ave S	Collector	35	244	47	996	84	71	60	**80**	Mod	V Good	11	5	**79**
1990	124th St	44th Ave S	45th Ave S	Collector	35	257	50	1,049	80	72	60	**77**	Mod	V Good	15	5	**77**
1993	124th St	45th Ave S	46th Ave S	Collector	35	243	47	992	83	71	60	**79**	Mod	V Good	12	5	**79**
1414	124th St	46th Ave S	47th Ave S	Collector	34	249	47	988	87	79	60	**84**	Mod	V Good	9	4	**84**

City of Tukwila, WA

Street Inventory and Condition Summary - Sorted by Street Name

GISID	On Street	From Street	To Street	FunCL	Pavement Width (ft)	Pavement Length (ft)	Add Area (yd2)	Pavement Area (yd2)	Condition Summary: Surface Distress Index (SDI)	Roughness Index (RI)	Structural Index (SI)	Pavement Cndtn Index (PCI)	Strength Rating	Condition Rating	Load Assoc Distress Deducts (LADD)	Non-Load Distress Deducts (NLAD)	Current Segment PCI (CPCI)
1991	124th St	47th Ave S	48th Ave S	Collector	34	254	48	1,008	75	82	30	**77**	Weak	V Good	19	6	**77**
1816	124th St	48th Ave S	49th Ave S	Collector	34	253	48	1,004	73	77	30	**75**	Weak	V Good	21	6	**74**
1553	124th St	49th Ave S	50th Pl S	Collector	34	253	48	1,004	76	67	60	**73**	Mod	V Good	18	6	**72**
1336	124th St	50th Pl S	51st Pl S	Local	20	409	45	954	83	64	60	**77**	Mod	V Good	12	5	**76**
1310	125th St	46th Ave S	50th Pl S	Local	20	1,156	128	2,697	86	68	60	**80**	Mod	V Good	12	2	**80**
1373	126th St	34th Ave S	35th Ave S	Local	20	405	45	945	95	84	60	**91**	Mod	Excellent	3	2	**91**
1512	126th St	35th Ave S	37th Ave S	Local	20	419	47	978	84	66	60	**78**	Mod	V Good	12	3	**78**
1643	126th St	37th Ave S	East Marginal Way S	Local	20	549	61	1,281	57	37	60	**51**	Mod	Fair	30	13	**50**
1366	126th St	40th Ave S	42nd Ave S	Local	20	317	35	740	76	55	60	**69**	Mod	Good	18	6	**68**
1905	128th St	Military Rd S	CITY LIMIT	Local	22	653	80	1,676	100	90	60	**97**	Mod	Excellent	0	0	**96**
1906	128th St	WEST END	35th Ave S	Local	22	218	27	560	79	60	60	**73**	Mod	V Good	14	7	**72**
1903	128th St	35th Ave S	37th Ave S	Local	22	409	50	1,050	94	82	60	**90**	Mod	Excellent	3	3	**89**
1242	128th St	37th Ave S	East Marginal Way S	Local	22	786	96	2,017	78	58	60	**71**	Mod	V Good	17	5	**71**
1241	128th St	East Marginal Way S	40th Ave S	Local	19	87	9	193	51	36	60	**46**	Mod	Marginal	30	19	**46**
1455	128th St	40th Ave S	Macadam Rd S	Local	19	854	90	1,893	71	52	60	**64**	Mod	Good	21	9	**64**
1549	130th Pl	50th Pl S	56th Ave S	Local	22	1,828	223	4,692	67	65	60	**66**	Mod	Good	26	7	**66**
1280	130th Pl	56th Ave S	57th Ave S	Local	22	270	33	693	92	78	60	**88**	Mod	Excellent	0	8	**87**
1170	130th St	32nd Ave S	33rd Ave S	Local	22	335	41	860	84	65	60	**78**	Mod	V Good	13	3	**77**
1141	130th St	33rd Pl S	34th Ave S	Local	22	99	12	254	87	68	60	**81**	Mod	V Good	10	4	**80**
1857	130th St	Tukwila Intl Blvd	35th Ave S	Local	22	215	26	552	61	34	60	**52**	Mod	Fair	32	8	**51**
1635	130th St	35th Ave S	35th Ln S	Local	25	284	39	828	58	50	60	**55**	Mod	Fair	30	12	**55**
1387	130th St	35th Ln S	37th Ave S	Local	25	121	17	353	91	72	60	**85**	Mod	V Good	6	3	**84**
1155	130th St	37th Ave S	38th Ave S	Local	25	237	33	691	87	68	60	**81**	Mod	V Good	10	3	**80**
2093	130th St	38th Ave S	38th Ln S	Local	25	261	36	761	90	70	60	**84**	Mod	V Good	5	4	**83**
2095	130th St	38th Ln S	East Marginal Way S	Local	25	282	39	823	65	38	60	**56**	Mod	Fair	25	10	**56**
1381	130th St	East Marginal Way S	41st Ave S	Local	25	285	40	831	76	56	60	**69**	Mod	Good	15	8	**69**
1140	130th St	41st Ave S	Macadam Rd S	Local	25	493	68	1,438	80	61	60	**74**	Mod	V Good	11	9	**73**
1893	131st Pl	41st Ave S	Macadam Rd S	Local	20	527	59	1,230	84	65	60	**78**	Mod	V Good	13	3	**77**
1186	131st Pl	Macadam Rd S	44th Ave S	Local	20	336	37	784	82	63	60	**76**	Mod	V Good	15	3	**75**
1185	131st Pl	44th Ave S	44th Ave S	Local	20	133	15	310	62	37	60	**54**	Mod	Fair	24	14	**53**
1007	132nd Pl	S 132nd Pl	S 132nd Pl	Local	19	214	23	474	54	23	60	**43**	Mod	Marginal	33	14	**43**
1917	132nd Pl	NW END	38th Pl S	Local	19	180	19	399	91	71	60	**84**	Mod	V Good	7	2	**84**
2097	132nd Pl	38th Pl S	40th Ave S	Local	19	285	30	632	65	38	60	**56**	Mod	Fair	26	9	**56**
1616	132nd St	33rd Ave S	34th Ave S	Collector	35	332	65	1,356	62	72	30	**65**	Weak	Good	31	8	**65**
2005	132nd St	34th Ave S	34th Ln S	Collector	34	248	47	984	48	62	60	**53**	Mod	Fair	41	10	**52**
2006	132nd St	34th Ln S	35th Ave S	Collector	33	96	18	370	63	59	60	**62**	Mod	Good	30	7	**61**
1615	132nd St	35th Ave S	Tukwila Intl Blvd	Collector	35	98	19	400	81	62	60	**75**	Mod	V Good	11	8	**74**
1618	132nd St	35th Ln S	37th Ave S	Local	22	132	16	339	70	47	60	**62**	Mod	Good	18	12	**62**
1529	133rd St	Military Rd S	30th Pl S	Collector	25	449	62	1,310	44	53	60	**47**	Mod	Marginal	32	20	**46**
1153	133rd St	30th Pl S	31st Ave S	Collector	25	208	29	607	44	82	60	**57**	Mod	Fair	35	21	**56**
1172	133rd St	31st Ave S	32nd Ave S	Collector	25	303	42	884	42	64	60	**49**	Mod	Marginal	39	20	**49**
1154	133rd St	32nd Ave S	S 132nd St	Collector	25	388	54	1,132	62	49	60	**58**	Mod	Fair	28	10	**57**
1520	133rd St	34th Ave S	35th Ave S	Local	22	309	38	793	45	30	60	**40**	Mod	Poor	41	14	**39**
1642	133rd St	35th Ave S	EAST END	Local	22	262	32	672	52	46	60	**50**	Mod	Marginal	32	16	**49**
1851	133rd St	East Marginal Way S	Macadam Rd S	Minor Arterial	34	488	92	1,936	82	74	60	**80**	Mod	V Good	14	4	**79**
1555	133rd St	Macadam Rd S	44th Ave S	Minor Arterial	34	334	63	1,325	93	79	60	**88**	Mod	Excellent	4	4	**88**

City of Tukwila, WA

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1862	133rd St	44th Ave S	S 134th Pl	Minor Arterial	34	481	91	1,908	80	62	60	**74**	Mod	V Good	14	5	**74**
1919	133rd St	S 134th Pl	SR 599 Ramp	Minor Arterial	35	388	75	1,584	68	88	30	**75**	Weak	V Good	25	7	**74**
1921	133rd St	SR 599 Ramp	SR 599	Minor Arterial	45	22	6	116	85	98	60	**89**	Mod	Excellent	12	3	**89**
1926	133rd St	SR 599	Interurban Ave S	Minor Arterial	35	210	41	858	67	61	60	**65**	Mod	Good	24	9	**65**
1858	133rd St	56th Ave S	57th Ave S	Local	27	259	39	816	95	84	60	**91**	Mod	Excellent	1	4	**91**
1829	134th Pl	S 133rd St	47th Ave S	Local	26	977	141	2,964	74	55	60	**68**	Mod	Good	16	9	**67**
1638	134th Pl	47th Ave S	48th Ave S	Local	26	215	31	652	81	62	60	**74**	Mod	V Good	17	2	**74**
1703	135th St	Military Rd S	32nd Ave S	Local	26	835	121	2,533	57	50	60	**55**	Mod	Fair	31	12	**54**
1702	135th St	32nd Ave S	34th Ave S	Local	27	637	96	2,007	80	61	60	**74**	Mod	V Good	14	6	**73**
1701	135th St	34th Ave S	35th Ave S	Local	27	320	48	1,008	69	55	60	**65**	Mod	Good	23	8	**64**
1214	135th St	35th Ave S	37th Ave S	Local	27	309	46	973	77	57	60	**71**	Mod	V Good	15	7	**70**
1899	136th St	32nd Ave S	34th Ave S	Local	27	670	101	2,111	72	50	60	**65**	Mod	Good	22	6	**65**
1676	136th St	WEST END	45th Pl S	Local	28	410	64	1,339	94	82	60	**90**	Mod	Excellent	4	3	**89**
1900	136th St	Macadam Rd S	48th Pl S	Local	28	302	47	987	74	52	60	**66**	Mod	Good	20	6	**66**
2084	136th St	WEST END	52nd Pl S	Local	28	80	12	261	88	69	60	**81**	Mod	V Good	8	5	**81**
2083	136th St	52nd Pl S	52nd Ave S	Local	28	284	44	928	87	68	60	**80**	Mod	V Good	1	3	**80**
1898	137th Pl	43rd Pl S	NORTH END	Local	28	136	21	444	65	41	60	**57**	Mod	Fair	27	8	**57**
1896	137th Pl	S 137th Pl	S 137th Pl	Local	26	188	27	570	83	64	60	**76**	Mod	V Good	12	5	**76**
1634	137th St	32nd Ave S	34th Ave S	Local	26	767	111	2,327	78	63	60	**73**	Mod	V Good	17	5	**73**
1830	137th St	34th Ave S	35th Ave S	Local	26	206	30	625	76	56	60	**70**	Mod	Good	18	6	**69**
1145	137th St	35th Ave S	37th Ave S	Local	26	300	43	910	70	60	60	**67**	Mod	Good	22	8	**66**
1139	137th St	40th Ave S	43rd Pl S	Local	26	150	22	455	63	38	60	**55**	Mod	Fair	30	6	**54**
1171	137th St	43rd Pl S	43rd Pl S	Local	25	285	40	831	69	52	60	**64**	Mod	Good	24	7	**63**
1835	137th St	43rd Pl S	44th Ave S	Local	25	420	58	1,225	85	67	60	**79**	Mod	V Good	12	3	**79**
1850	137th St	44th Ave S	45th Ave S	Local	25	387	54	1,129	88	69	60	**82**	Mod	V Good	9	3	**81**
1173	137th St	45th Ave S	45th Pl S	Local	25	248	34	723	86	67	60	**79**	Mod	V Good	10	4	**79**
1849	137th St	45th Pl S	Macadam Rd S	Local	25	163	23	475	86	68	60	**80**	Mod	V Good	6	8	**80**
1854	137th St	52nd Ave S	52nd Pl S	Local	27	208	31	655	44	49	60	**46**	Mod	Marginal	41	16	**45**
1847	137th St	52nd Pl S	53rd Ave S	Local	27	127	19	400	52	38	60	**48**	Mod	Marginal	37	10	**47**
1636	137th St	53rd Ave S	53rd Ave S	Local	27	152	23	479	65	38	60	**56**	Mod	Fair	19	16	**56**
1637	137th St	53rd Ave S	56th Ave S	Local	27	224	34	706	39	34	60	**37**	Mod	Poor	43	18	**37**
1958	138th St	37th Ave S	38th Ave S	Local	27	340	51	1,071	82	64	60	**76**	Mod	V Good	12	6	**76**
1959	138th St	Macadam Rd S	NE END	Local	27	268	40	844	56	45	60	**53**	Mod	Fair	28	11	**52**
2085	138th St	51st Ave S	51st Ave S	Local	27	114	17	359	84	65	60	**77**	Mod	V Good	13	3	**77**
1121	139th St	Tukwila Intl Blvd	41st Ave S	Local	24	382	51	1,070	69	45	60	**61**	Mod	Good	23	7	**61**
1124	139th St	41st Ave S	42nd Ave S	Local	24	348	46	974	83	64	60	**77**	Mod	V Good	12	5	**76**
1125	139th St	42nd Ave S	44th Ave S	Local	24	620	83	1,736	64	48	60	**59**	Mod	Fair	28	7	**58**
1126	139th St	WEST END	45th Ave S	Local	24	113	15	316	85	67	60	**79**	Mod	V Good	10	5	**79**
1123	139th St	45th Ave S	EAST END	Local	24	295	39	826	77	57	60	**70**	Mod	V Good	19	4	**70**
1128	139th St	51st Ave S	53rd Ave S	Local	26	546	79	1,656	76	55	60	**69**	Mod	Good	20	4	**68**
1127	139th St	53rd Ave S	55th Ave S	Local	26	374	54	1,134	50	39	60	**46**	Mod	Marginal	37	7	**45**
1122	139th St	56th Ave S	56th Pl S	Local	26	183	26	555	50	24	80	**41**	Strng	Marginal	29	21	**41**
1600	140th St	Military Rd S	33rd Ave S	Local	26	358	52	1,086	60	48	60	**56**	Mod	Fair	29	11	**55**
1602	140th St	33rd Ave S	33rd Pl S	Local	26	426	62	1,292	71	57	60	**66**	Mod	Good	21	8	**66**
1485	140th St	33rd Pl S	35th Ave S	Local	27	537	81	1,692	66	49	60	**60**	Mod	Good	22	12	**60**
1483	140th St	35th Ave S	34th Ave S	Local	27	59	9	186	58	49	60	**55**	Mod	Fair	30	12	**54**

City of Tukwila, WA

Street Inventory and Condition Summary - Sorted by Street Name

IMS Easy Street Analysis

GISID	On Street	From Street	To Street	FunCL	Pavement Width (ft)	Pavement Length (ft)	Add Area (yd2)	Pavement Area (yd2)	Condition Summary: Surface Distress Index (SDI)	Roughness Index (RI)	Structural Index (SI)	Pavement Cndtn Index (PCI)	Strength Rating	Condition Rating	Load Assoc Distress Deducts (LADD)	Non-Load Distress Deducts (NLAD)	Current Segment PCI (CPCI)
1601	140th St	34th Ave S	37th Ave S	Local	27	369	55	1,162	33	39	60	**35**	Mod	Poor	51	16	**34**
1604	140th St	37th Ave S	38th Ave S	Local	27	307	46	967	45	42	60	**44**	Mod	Marginal	35	13	**44**
1484	140th St	38th Ave S	Tukwila Intl Blvd	Local	27	336	50	1,058	47	32	60	**42**	Mod	Marginal	41	12	**41**
1603	140th St	Tukwila Intl Blvd	42nd Ave S	Local	26	646	93	1,960	78	59	60	**72**	Mod	V Good	17	5	**72**
1486	140th St	42nd Ave S	43rd Ave S	Local	26	326	47	989	54	61	60	**57**	Mod	Fair	36	10	**56**
1599	140th St	43rd Ave S	44th Ave S	Local	26	329	48	998	74	60	60	**69**	Mod	Good	22	5	**69**
1605	140th St	44th Ave S	45th Ave S	Local	26	364	53	1,104	67	49	60	**61**	Mod	Good	29	4	**60**
1547	140th St	45th Ave S	EAST END	Local	26	568	82	1,723	91	75	60	**86**	Mod	Excellent	8	0	**86**
1598	140th St	53rd Ave S	55th Ave S	Local	24	540	72	1,512	79	59	60	**72**	Mod	V Good	16	6	**72**
1482	140th St	Interurban Ave S	NE END	Local	24	207	28	580	65	38	60	**56**	Mod	Fair	24	10	**56**
1588	141st St	33rd Pl S	34th Pl S	Local	24	178	24	498	86	67	60	**80**	Mod	V Good	10	4	**79**
1589	141st St	37th Ave S	Tukwila Intl Blvd	Local	24	690	92	1,932	49	43	60	**47**	Mod	Marginal	39	12	**46**
1587	141st St	Tukwila Intl Blvd	42nd Ave S	Local	24	589	79	1,649	53	41	60	**49**	Mod	Marginal	31	15	**49**
1591	141st St	56th Ave S	56th Pl S	Local	24	239	32	669	36	39	80	**37**	Strng	Poor	37	18	**37**
1590	141st St	56th Pl S	57th Ave S	Local	25	167	23	487	51	45	60	**49**	Mod	Marginal	32	17	**48**
1089	142nd Pl	Military Rd S	EAST END	Local	25	208	29	607	80	61	60	**73**	Mod	V Good	14	7	**73**
1090	142nd Pl	S 142nd Pl	S 142nd Pl	Local	25	146	20	426	88	69	60	**81**	Mod	V Good	4	9	**81**
1279	142nd Pl	35th Ave S	37th Ave S	Local	25	436	61	1,272	66	40	60	**57**	Mod	Fair	26	8	**57**
1742	142nd St	37th Ave S	Tukwila Intl Blvd	Local	25	700	97	2,042	55	48	60	**53**	Mod	Fair	33	12	**52**
1743	142nd St	42nd Ave S	43rd Ave S	Local	26	318	46	965	68	44	60	**60**	Mod	Good	25	7	**59**
1739	142nd St	WEST END	52nd Ave S	Local	26	85	12	258	83	64	60	**77**	Mod	V Good	6	11	**76**
1744	142nd St	52nd Ave S	53rd Ave S	Local	26	272	39	825	79	60	60	**73**	Mod	V Good	15	6	**72**
1737	142nd St	57th Ave S	59th Ave S	Local	26	426	62	1,292	57	31	60	**49**	Mod	Marginal	31	12	**48**
1353	143rd Pl	Interurban Ave S	EAST END	Local	26	839	121	2,545	88	69	60	**81**	Mod	V Good	10	3	**81**
1138	143rd St	Interurban Ave S	EAST END	Local	26	1,107	160	3,358	60	50	60	**57**	Mod	Fair	26	9	**56**
1677	144th St	Military Rd S	34th Ave S	Collector	30	319	53	1,117	61	60	60	**61**	Mod	Good	30	9	**60**
2016	144th St	34th Ave S	34th Ln S	Collector	30	289	48	1,012	74	80	30	**76**	Weak	V Good	20	6	**76**
2015	144th St	34th Ln S	37th Ave S	Collector	30	495	83	1,733	58	75	30	**64**	Weak	Good	33	9	**63**
1187	144th St	37th Ave S	Tukwila Intl Blvd	Collector	30	540	90	1,890	59	61	60	**60**	Mod	Fair	31	10	**59**
1678	144th St	Tukwila Intl Blvd	41st Ave S	Collector	30	392	65	1,372	69	44	60	**61**	Mod	Good	24	7	**60**
1191	144th St	41st Ave S	42nd Ave S	Collector	30	390	65	1,365	82	63	60	**76**	Mod	V Good	14	4	**76**
2074	144th St	42nd Ave S	44th Ln S	Collector	29	777	125	2,629	53	74	60	**60**	Mod	Fair	35	11	**59**
2073	144th St	44th Ln S	46th Ave S	Collector	29	545	88	1,844	47	64	60	**53**	Mod	Fair	37	17	**52**
1194	144th St	46th Ave S	48th Ave S	Collector	29	653	105	2,209	47	75	30	**57**	Weak	Fair	41	12	**56**
1190	144th St	48th Ave S	Macadam Rd S	Collector	29	654	105	2,213	52	58	60	**54**	Mod	Fair	37	10	**54**
2079	144th St	Macadam Rd S	I-5 Fwy	Collector	29	187	30	633	79	60	60	**73**	Mod	V Good	16	5	**73**
2076	144th St	I-5 Fwy	53rd Ave S	Collector	29	254	41	859	58	54	60	**56**	Mod	Fair	30	12	**56**
1189	144th St	53rd Ave S	Macadam Rd S	Collector	31	106	18	383	100	90	60	**97**	Mod	Excellent	0	0	**96**
1245	144th St	Macadam Rd S	54th Pl S	Collector	31	343	59	1,241	59	59	60	**59**	Mod	Fair	27	14	**59**
1244	144th St	54th Pl S	55th Ave S	Collector	31	129	22	467	57	57	60	**57**	Mod	Fair	27	16	**56**
1679	144th St	55th Ave S	56th Ave S	Collector	31	421	73	1,523	61	53	60	**58**	Mod	Fair	26	13	**58**
1192	144th St	56th Ave S	57th Ave S	Collector	31	425	73	1,537	82	63	60	**76**	Mod	V Good	9	8	**75**
1193	144th St	57th Ave S	58th Ave S	Collector	31	427	74	1,544	54	34	60	**47**	Mod	Marginal	30	15	**46**
1243	144th St	58th Ave S	59th Ave S	Local	27	420	63	1,323	60	41	60	**54**	Mod	Fair	29	11	**53**
1188	144th St	59th Ave S	EAST END	Local	27	218	33	687	63	38	60	**55**	Mod	Fair	25	11	**54**
1246	144th St	Interurban Ave S	EAST END	Local	27	651	98	2,051	63	35	60	**54**	Mod	Fair	31	6	**53**

City of Tukwila, WA

Street Inventory and Condition Summary - Sorted by Street Name

GISID	On Street	From Street	To Street	FunCL	Pavement Width (ft)	Pavement Length (ft)	Add Area (yd2)	Pavement Area (yd2)	Condition Summary: Surface Distress Index (SDI)	Roughness Index (RI)	Structural Index (SI)	Pavement Cndtn Index (PCI)	Strength Rating	Condition Rating	Load Assoc Distress Deducts (LADD)	Non-Load Distress Deducts (NLAD)	Current Segment PCI (CPCI)
1509	145th St	48th Pl S	EAST END	Local	27	231	35	728	96	86	60	**92**	Mod	Excellent	3	1	**92**
1367	145th St	S 145th St	DS@63E S 145th St	Local	27	63	9	198	93	79	60	**88**	Mod	Excellent	1	6	**88**
1361	145th St	DS@63E S 145th St	S 145th St	Local	27	95	14	299	80	61	80	**74**	Strng	V Good	0	20	**73**
1805	146th St	Military Rd S	35th Ave S	Local	25	435	60	1,269	75	56	60	**69**	Mod	Good	20	5	**68**
1804	146th St	35th Ave S	Tukwila Intl Blvd	Local	25	681	95	1,986	65	55	60	**62**	Mod	Good	23	8	**61**
1942	146th St	Tukwila Intl Blvd	41st Ave S	Local	25	659	92	1,922	49	48	60	**49**	Mod	Marginal	37	14	**48**
1801	146th St	41st Ave S	42nd Ave S	Local	25	347	48	1,012	56	48	60	**54**	Mod	Fair	27	13	**53**
1806	146th St	42nd Ave S	46th Ave S	Local	25	1,318	183	3,844	74	71	30	**73**	Weak	V Good	23	3	**73**
1803	146th St	46th Ave S	48th Pl S	Local	25	793	110	2,313	54	56	60	**55**	Mod	Fair	37	9	**54**
1802	146th St	48th Pl S	EAST END	Local	26	316	46	959	75	54	60	**68**	Mod	Good	21	5	**67**
1758	147th St	56th Ave S	57th Ave S	Local	26	377	54	1,144	91	73	60	**85**	Mod	Excellent	5	4	**85**
1251	147th St	57th Ave S	58th Ave S	Local	26	427	62	1,295	85	67	60	**79**	Mod	V Good	13	2	**79**
1252	147th St	58th Ave S	59th Aly S	Collector	35	205	40	837	83	65	60	**77**	Mod	V Good	14	3	**77**
1756	147th St	59th Aly S	59th Ave S	Collector	35	99	19	404	88	69	60	**82**	Mod	V Good	9	2	**82**
1759	147th St	59th Ave S	59th Ave S	Collector	35	131	25	535	66	39	60	**57**	Mod	Fair	23	11	**56**
1757	147th St	Interurban Ave S	EAST END	Local	32	120	21	448	70	47	60	**62**	Mod	Good	22	8	**62**
1578	148th St	Military Rd S	Tukwila Intl Blvd	Local	32	817	145	3,050	68	54	60	**63**	Mod	Good	25	6	**63**
1272	148th St	Tukwila Intl Blvd	42nd Ave S	Local	32	1,233	219	4,603	62	55	60	**60**	Mod	Good	30	8	**59**
1273	148th St	42nd Ave S	46th Ave S	Local	32	1,314	234	4,906	67	62	60	**65**	Mod	Good	24	4	**65**
2071	148th St	46th Ave S	46th Ln S	Local	32	255	45	952	67	60	60	**65**	Mod	Good	23	10	**64**
2070	148th St	46th Ln S	46th Ln S	Local	32	153	27	571	98	89	60	**95**	Mod	Excellent	1	0	**95**
1271	148th St	46th Ln S	EAST END	Local	32	218	39	814	88	69	60	**82**	Mod	V Good	4	8	**82**
1335	149th St	WEST END	57th Ave S	Local	32	656	117	2,449	81	62	60	**75**	Mod	V Good	14	5	**74**
1506	149th St	59th Ave S	62nd Ave S	Local	32	674	120	2,516	79	60	60	**72**	Mod	V Good	17	5	**72**
1345	149th St	DS@480E NW END	Interurban Ave S	Local	32	537	95	2,005	51	46	60	**49**	Mod	Marginal	35	10	**49**
1501	150th Pl	WEST END	57th Ave S	Local	32	767	136	2,863	83	65	60	**77**	Mod	V Good	13	4	**77**
1369	150th St	Tukwila Intl Blvd	38th Ave S	Local	32	530	94	1,979	90	70	60	**83**	Mod	V Good	10	0	**83**
1374	150th St	38th Ave S	41st Pl S	Local	32	688	122	2,569	93	81	60	**89**	Mod	Excellent	4	3	**89**
1376	150th St	41st Pl S	42nd Ave S	Local	32	242	43	903	73	51	60	**65**	Mod	Good	22	6	**65**
1350	150th St	42nd Ave S	43rd Pl S	Local	32	527	94	1,967	69	50	60	**63**	Mod	Good	22	9	**62**
1349	150th St	43rd Pl S	46th Ave S	Local	32	788	140	2,942	73	59	60	**69**	Mod	Good	21	5	**68**
1358	150th St	46th Ave S	EAST END	Local	32	898	160	3,353	56	35	60	**49**	Mod	Marginal	31	13	**94**
1354	150th St	Macadam Rd S	EAST END	Local	32	767	136	2,863	76	56	60	**69**	Mod	Good	18	6	**69**
1662	151st Pl	EAST END	EAST END	Local	32	183	33	683	58	29	60	**48**	Mod	Marginal	28	14	**47**
1607	151st Pl	WEST END	63rd Pl S	Local	32	98	17	366	63	48	60	**58**	Mod	Fair	26	11	**57**
1546	151st Pl	63rd Pl S	EAST END	Local	32	161	29	601	68	58	60	**65**	Mod	Good	19	13	**64**
1606	151st Pl	EAST END	EAST END	Local	32	182	32	679	81	62	60	**74**	Mod	V Good	9	10	**74**
1544	151st St	S 151st St	DS@90E S 151st St	Local	32	90	16	336	92	77	60	**87**	Mod	Excellent	3	5	**87**
1299	151st St	DS@90E S 151st St	S 151st St	Local	32	44	8	164	75	54	80	**68**	Strng	Good	6	19	**68**
1543	151st St	WEST END	42nd Ave S	Local	32	220	39	821	78	58	60	**71**	Mod	V Good	16	6	**71**
1542	151st St	51st Ave S	52nd Ave S	Local	32	375	67	1,400	72	49	60	**64**	Mod	Good	24	5	**64**
1298	151st St	62nd Ave S	63rd Pl S	Collector	35	310	60	1,266	65	68	60	**66**	Mod	Good	24	11	**65**
1300	151st St	63rd Pl S	65th Ave S	Collector	35	332	65	1,356	68	65	60	**67**	Mod	Good	18	14	**66**
1995	152nd Pl	57th Ave S	EAST END	Local	26	458	66	1,389	54	27	60	**45**	Mod	Marginal	37	10	**44**
1718	152nd St	International Blvd	37th Pl S	Local	26	717	104	2,175	45	48	60	**47**	Mod	Marginal	40	13	**46**
1719	152nd St	37th Pl S	40th Ave S	Local	26	656	95	1,990	55	56	60	**55**	Mod	Fair	38	7	**55**

City of Tukwila, WA

Street Inventory and Condition Summary - Sorted by Street Name

IMS Easy Street Analysis

GISID	On Street	From Street	To Street	FunCL	Pavement Width (ft)	Pavement Length (ft)	Add Area (yd2)	Pavement Area (yd2)	Condition Summary: Surface Distress Index (SDI)	Roughness Index (RI)	Structural Index (SI)	Pavement Cndtn Index (PCI)	Strength Rating	Condition Rating	Load Assoc Distress Deducts (LADD)	Non-Load Distress Deducts (NLAD)	Current Segment PCI (CPCI)
1108	152nd St	40th Ave S	42nd Ave S	Local	25	315	44	919	44	29	60	**39**	Mod	Poor	43	13	**38**
1720	152nd St	WEST END	51st Ave S	Local	25	271	38	790	72	50	60	**65**	Mod	Good	22	6	**64**
1717	152nd St	Macadam Rd S	57th Ave S	Local	26	895	129	2,715	78	61	60	**72**	Mod	V Good	19	3	**72**
1716	152nd St	57th Ave S	EAST END	Local	26	537	78	1,629	70	47	60	**63**	Mod	Good	18	6	**62**
1584	153rd St	62nd Ave S	64th Ave S	Local	26	590	85	1,790	77	57	60	**70**	Mod	Good	11	13	**69**
1585	153rd St	64th Ave S	65th Ave S	Local	26	410	59	1,244	88	69	60	**82**	Mod	V Good	3	9	**81**
1661	153rd St	65th Ave S	EAST END	Local	27	659	99	2,076	69	44	60	**60**	Mod	Good	24	7	**60**
2023	156th St	44th Ave S	44th Pl S	Local	27	407	61	1,282	88	69	60	**82**	Mod	V Good	9	3	**81**
2022	156th St	44th Pl S	47th Ave S	Local	25	415	58	1,210	89	70	60	**83**	Mod	V Good	8	4	**82**
1197	156th St	I-405 Ramp	Nelsen Pl	Local	26	431	62	1,307	51	61	60	**55**	Mod	Fair	33	16	**54**
1852	158th St	S 160th St	Military Rd S	Local	27	135	20	425	65	45	60	**59**	Mod	Fair	25	10	**58**
1526	158th St	Military Rd S	38th Pl S	Local	27	870	131	2,741	73	61	60	**69**	Mod	Good	21	6	**69**
1649	158th St	38th Pl S	38th Pl S	Local	28	38	6	124	98	89	60	**95**	Mod	Excellent	0	2	**95**
1650	158th St	38th Pl S	39th Pl S	Local	25	100	14	292	98	89	60	**95**	Mod	Excellent	0	3	**94**
1522	158th St	39th Pl S	40th Pl S	Local	25	277	38	808	68	55	60	**64**	Mod	Good	21	11	**94**
1646	158th St	40th Pl S	40th Ln S	Local	27	184	28	580	60	45	60	**55**	Mod	Fair	23	17	**94**
1556	158th St	40th Ln S	42nd Ave S	Local	26	350	51	1,062	51	44	60	**49**	Mod	Marginal	35	14	**94**
1525	158th St	42nd Ave S	44th Ave S	Local	25	740	103	2,158	93	80	60	**89**	Mod	Excellent	4	3	**88**
1527	158th St	44th Ave S	47th Ave S	Local	25	856	119	2,497	88	69	60	**81**	Mod	V Good	9	4	**81**
1807	159th St	51st Ave S	53rd Ave S	Local	25	721	100	2,103	74	53	60	**67**	Mod	Good	15	11	**66**
1907	160th St	42nd Ave S	43rd Ave S	Collector	29	348	56	1,177	63	49	60	**58**	Mod	Fair	25	12	**58**
1476	160th St	43rd Ave S	46th Ave S	Collector	29	1,029	166	3,481	63	57	60	**61**	Mod	Good	25	12	**60**
1469	160th St	46th Ave S	47th Ave S	Collector	29	302	49	1,022	61	45	60	**56**	Mod	Fair	29	10	**55**
1908	160th St	47th Ave S	48th Ave S	Collector	28	300	47	980	67	41	60	**58**	Mod	Fair	23	10	**58**
1468	160th St	48th Ave S	51st Ave S	Collector	28	689	107	2,251	63	45	60	**57**	Mod	Fair	25	12	**56**
1909	160th St	51st Ave S	Slade Way	Collector	28	802	125	2,620	63	59	60	**62**	Mod	Good	27	10	**61**
1545	161st St	S 161st St	DS@78W S 161st St	Local	24	78	10	218	48	32	60	**43**	Mod	Marginal	42	10	**42**
1797	161st St	DS@78W S 161st St	S 161st St	Local	24	79	11	221	76	56	60	**69**	Mod	Good	23	1	**69**
1798	161st St	WEST END	51st Ave S	Local	24	364	49	1,019	69	45	60	**61**	Mod	Good	21	10	**60**
1220	162nd St	46th Ave S	EAST END	Local	24	125	17	350	60	28	60	**50**	Mod	Marginal	26	13	**49**
1219	162nd St	48th Ave S	EAST END	Local	25	301	42	878	51	37	60	**46**	Mod	Marginal	39	10	**45**
1264	163rd Pl	45th Ave S	45th Pl S	Local	25	142	20	414	70	47	60	**63**	Mod	Good	18	12	**62**
1262	163rd Pl	45th Pl S	46th Ave S	Local	25	140	19	408	63	34	60	**54**	Mod	Fair	28	9	**53**
1263	163rd Pl	51st Ave S	EAST END	Local	26	483	70	1,465	58	42	60	**53**	Mod	Fair	24	12	**52**
1261	163rd Pl	S 163rd Pl	S 163rd Pl	Local	26	139	20	422	57	45	60	**53**	Mod	Fair	24	20	**52**
1490	164th St	42nd Ave S	47th Ave S	Collector	31	1,551	267	5,609	53	62	60	**56**	Mod	Fair	36	8	**55**
1404	164th St	47th Ave S	47th Pl S	Collector	31	121	21	438	67	64	60	**66**	Mod	Good	24	9	**66**
1489	164th St	47th Pl S	48th Pl S	Collector	31	389	67	1,407	75	69	60	**73**	Mod	V Good	21	4	**72**
1493	164th St	48th Pl S	49th Ave S	Collector	32	202	36	754	56	67	30	**60**	Weak	Fair	38	6	**59**
1491	164th St	49th Ave S	51st Ave S	Collector	32	379	67	1,415	66	40	60	**58**	Mod	Fair	26	7	**57**
1492	164th St	51st Ave S	52nd Ave S	Local	25	545	76	1,590	59	42	60	**53**	Mod	Fair	25	16	**53**
1989	164th St	52nd Ave S	EAST END	Local	25	277	38	808	59	58	60	**59**	Mod	Fair	27	13	**58**
2155	166th St	S 166th St	51st Ave S	Collector	35	152	30	621	74	57	60	**68**	Mod	Good	22	5	**68**
1215	166th St	CITY LIMIT	53rd Ave S	Local	25	190	26	554	66	53	60	**62**	Mod	Good	25	9	**61**
1565	166th St	53rd Ave S	54th Ave S	Local	26	270	39	819	55	49	60	**53**	Mod	Fair	31	14	**52**
1910	168th St	WEST END	Southcenter Pkwy	Local	27	276	41	869	69	45	60	**61**	Mod	Good	20	11	**60**

City of Tukwila, WA

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									Surface Distress Index (SDI)	Roughness Index (RI)	Structural Index (SI)	Pavement Cndtn Index (PCI)	Strength Rating	Condition Rating	Load Assoc Distress Deducts (LADD)	Non-Load Distress Deducts (NLAD)	Current Segment PCI (CPCI)
1003	168th St	Southcenter Pkwy	DS@359E Southcenter Pkwy	Local	25	359	50	1,047	70	46	60	**62**	Mod	Good	21	10	**61**
1100	180th St	Southcenter Pkwy	Andover Park W	Minor Arterial	45	1,434	359	7,529	67	66	60	**67**	Mod	Good	24	9	**66**
1723	180th St	Andover Park W	Andover Park E	Minor Arterial	45	918	230	4,820	51	62	60	**55**	Mod	Fair	36	13	**54**
1223	180th St	Andover Park E	Sperry Dr	Minor Arterial	45	881	220	4,625	47	64	30	**52**	Weak	Fair	44	9	**52**
1222	180th St	Sperry Dr	West Valley Hwy	Minor Arterial	45	528	132	2,772	41	56	30	**46**	Weak	Marginal	50	9	**45**
1101	180th St	West Valley Hwy	S 180th St	Principal Arterial	45	1,234	309	6,479	52	58	60	**54**	Mod	Fair	39	6	**54**
1465	184th Pl	54th Pl S	Southcenter Pkwy	Minor Arterial	45	2,072	518	10,878	75	68	60	**73**	Mod	V Good	18	6	**73**
1888	200th St	Orillia Rd S	46th Ave S	Principal Arterial	56	247	77	1,614	99	90	60	**96**	Mod	Excellent	1	0	**95**
1097	200th St	46th Ave S	Southcenter Pkwy	Principal Arterial	56	1,315	409	8,591	100	90	60	**97**	Mod	Excellent	0	0	**96**
1454	200th St	Southcenter Pkwy	CITY LIMIT	Principal Arterial	56	1,439	448	9,401	37	71	60	**48**	Mod	Marginal	38	25	**48**
1120	204th St	Orillia Rd S	Frager Rd	Local	25	3,339	464	9,739	45	56	60	**48**	Mod	Marginal	39	15	**48**
1957	27th Ave S	S 102nd St	SOUTH END	Local	24	1,756	234	4,917	83	74	60	**80**	Mod	V Good	13	4	**79**
1787	32nd Ave S	S 130th St	S 133rd St	Local	19	763	81	1,691	49	51	60	**50**	Mod	Fair	36	15	**49**
2013	32nd Ave S	S 133rd St	S 133rd Ln	Local	19	306	32	678	86	67	60	**80**	Mod	V Good	12	2	**79**
2011	32nd Ave S	S 133rd Ln	S 135th St	Local	19	345	36	765	63	52	60	**60**	Mod	Fair	28	8	**59**
1792	32nd Ave S	S 135th St	S 136th St	Local	20	319	35	744	75	55	60	**68**	Mod	Good	19	6	**68**
1786	32nd Ave S	S 136th St	S 137th St	Local	19	274	29	607	75	69	30	**73**	Weak	V Good	22	2	**73**
1791	32nd Ave S	S 137th St	SOUTH END	Local	20	135	15	315	94	82	60	**90**	Mod	Excellent	0	6	**89**
1446	33rd Ave S	S 130th St	S 132nd St	Local	19	755	80	1,674	79	60	60	**73**	Mod	V Good	17	4	**72**
1447	33rd Ave S	S 140th St	34th Pl S	Local	19	993	105	2,201	89	69	60	**82**	Mod	V Good	8	3	**82**
1474	33rd Pl S	S 140th St	S 141st St	Local	20	358	40	835	78	59	60	**72**	Mod	V Good	18	4	**71**
1582	33rd Pl S	NW END	S 130th St	Local	20	326	36	761	60	28	60	**49**	Mod	Marginal	33	7	**48**
1463	33rd Pl S	33rd Pl S	33rd Pl S	Local	19	130	14	288	65	38	60	**56**	Mod	Fair	27	8	**56**
1207	34th Ave S	S 126th St	SOUTH END	Local	24	628	84	1,758	75	54	60	**68**	Mod	Good	16	6	**67**
1208	34th Ave S	S 130th St	S 132nd St	Local	25	693	96	2,021	75	54	60	**68**	Mod	Good	17	8	**67**
1211	34th Ave S	S 132nd St	S 133rd St	Local	25	285	40	831	77	76	30	**77**	Weak	V Good	19	4	**77**
1206	34th Ave S	S 133rd St	S 135th St	Local	30	664	111	2,324	73	55	60	**67**	Mod	Good	20	7	**66**
1210	34th Ave S	S 135th St	S 136th St	Local	28	327	51	1,068	75	65	60	**72**	Mod	V Good	20	5	**72**
1203	34th Ave S	S 136th St	S 137th St	Local	28	286	44	934	82	64	60	**76**	Mod	V Good	15	4	**75**
1212	34th Ave S	S 137th St	S 140th St	Local	28	1,067	166	3,486	79	60	60	**73**	Mod	V Good	16	5	**72**
1204	34th Ave S	33rd Ave S	S 144th St	Local	29	511	82	1,729	89	70	60	**82**	Mod	V Good	11	0	**82**
1205	34th Ave S	S 144th St	Military Rd S	Local	22	582	71	1,494	85	67	60	**79**	Mod	V Good	11	4	**79**
1209	34th Pl S	S 141st St	33rd Ave S	Local	25	478	66	1,394	88	69	60	**82**	Mod	V Good	7	5	**81**
1732	35th Ave S	S 124th St	S 126th St	Local	21	869	101	2,129	65	43	60	**58**	Mod	Fair	22	13	**57**
1733	35th Ave S	S 126th St	S 128th St	Local	22	423	52	1,086	54	46	60	**52**	Mod	Fair	29	13	**51**
1099	35th Ave S	S 128th St	S 130th St	Local	21	636	74	1,558	52	33	60	**46**	Mod	Marginal	34	11	**45**
2004	35th Ave S	S 130th St	Tukwila Intl Blvd	Local	22	310	38	796	58	29	60	**48**	Mod	Marginal	31	10	**48**
1730	35th Ave S	S 132nd St	S 133rd St	Local	32	441	78	1,646	78	58	60	**71**	Mod	V Good	13	9	**71**
1236	35th Ave S	S 133rd St	S 135th St	Local	32	663	118	2,475	57	52	60	**55**	Mod	Fair	28	15	**54**
1234	35th Ave S	S 135th St	S 137th St	Local	28	592	92	1,934	79	60	60	**73**	Mod	V Good	17	3	**73**
1235	35th Ave S	S 140th St	S 142nd Pl	Local	29	833	134	2,818	57	46	60	**53**	Mod	Fair	32	11	**53**
1233	35th Ave S	S 146th St	SOUTH END	Local	30	294	49	1,029	71	47	60	**63**	Mod	Good	21	8	**62**
1741	35th Ln S	S 130th St	S 132nd St	Local	19	483	51	1,071	51	36	60	**46**	Mod	Marginal	31	15	**45**
1107	37th Ave S	S 126th St	S 128th St	Local	19	434	46	962	84	65	60	**78**	Mod	V Good	11	5	**77**
1064	37th Ave S	S 128th St	S 130th St	Local	22	621	76	1,594	47	41	60	**45**	Mod	Marginal	37	16	**44**
1065	37th Ave S	S 130th St	S 132nd St	Local	30	418	70	1,463	55	69	60	**60**	Mod	Good	34	10	**59**

City of Tukwila, WA

Street Inventory and Condition Summary - Sorted by Street Name

GISID	On Street	From Street	To Street	FunCL	Pavement Width (ft)	Pavement Length (ft)	Add Area (yd2)	Pavement Area (yd2)	Condition Summary: Surface Distress Index (SDI)	Roughness Index (RI)	Structural Index (SI)	Pavement Cndtn Index (PCI)	Strength Rating	Condition Rating	Load Assoc Distress Deducts (LADD)	Non-Load Distress Deducts (NLAD)	Current Segment PCI (CPCI)
1072	37th Ave S	S 132nd St	SOUTH END	Local	30	347	58	1,215	83	64	60	**76**	Mod	V Good	13	4	**76**
2008	37th Ave S	Tukwila Intl Blvd	S 135th St	Local	25	652	91	1,902	53	44	60	**50**	Mod	Marginal	36	11	**49**
1071	37th Ave S	S 135th St	S 137th St	Local	32	590	105	2,203	61	67	30	**63**	Weak	Good	32	7	**63**
1066	37th Ave S	S 137th St	S 138th St	Local	32	321	57	1,198	60	56	60	**59**	Mod	Fair	31	8	**58**
1068	37th Ave S	S 138th St	S 140th St	Local	32	721	128	2,692	62	71	60	**65**	Mod	Good	29	8	**65**
1067	37th Ave S	S 140th St	S 141st St	Local	32	230	41	859	41	47	60	**43**	Mod	Marginal	44	15	**43**
1063	37th Ave S	S 141st St	S 142nd St	Local	24	461	61	1,291	42	65	60	**50**	Mod	Fair	43	14	**49**
1069	37th Ave S	S 142nd St	S 142nd Pl	Local	26	156	23	473	56	80	30	**64**	Weak	Good	32	12	**63**
1070	37th Ave S	S 142nd Pl	S 144th St	Local	26	502	73	1,523	51	64	60	**56**	Mod	Fair	37	12	**55**
1308	38th Ave S	S 130th St	SOUTH END	Local	22	603	74	1,548	72	56	60	**67**	Mod	Good	18	10	**66**
1309	38th Ave S	S 138th St	S 140th St	Local	30	632	105	2,212	70	58	60	**66**	Mod	Good	26	4	**65**
2094	38th Ln S	S 130th St	SOUTH END	Local	24	169	23	473	78	59	60	**72**	Mod	V Good	13	9	**71**
1006	38th Ln S	38th Ln S	38th Ln S	Local	19	162	17	359	98	89	60	**95**	Mod	Excellent	0	2	**95**
1918	38th Pl S	NORTH END	S 132nd Pl	Local	20	163	18	380	51	39	60	**47**	Mod	Marginal	38	11	**46**
1970	39th Ave S	S 116th St	S 117th St	Local	22	294	36	755	68	62	60	**66**	Mod	Good	27	4	**66**
1842	40th Ave S	S 114th St	S 115th St	Local	19	310	33	687	48	26	60	**41**	Mod	Marginal	36	16	**40**
1169	40th Ave S	NORTH END	S 116th Pl	Local	20	243	27	567	95	84	60	**91**	Mod	Excellent	3	3	**91**
1831	40th Ave S	S 116th Pl	S 117th St	Local	24	202	27	566	95	84	60	**91**	Mod	Excellent	3	2	**91**
1156	40th Ave S	S 117th St	S 117th Pl	Local	25	181	25	528	96	87	60	**93**	Mod	Excellent	1	3	**93**
1855	40th Ave S	S 117th Pl	Interurban Pl S	Local	24	480	64	1,344	97	88	60	**94**	Mod	Excellent	0	3	**93**
1861	40th Ave S	Interurban Pl S	Interurban Ave S	Local	25	109	15	318	75	55	60	**68**	Mod	Good	22	3	**68**
1143	40th Ave S	S 126th St	S 128th St	Local	25	317	44	925	66	39	60	**57**	Mod	Fair	22	12	**56**
1825	40th Ave S	East Marginal Way S	S 132nd Pl	Collector	26	881	127	2,672	51	59	60	**54**	Mod	Fair	34	15	**53**
2096	40th Ave S	S 132nd Pl	42nd Ave S	Collector	27	1,544	232	4,864	61	73	60	**65**	Mod	Good	29	10	**65**
1379	40th Ave S	S 152nd St	Southcenter Blvd	Local	24	632	84	1,770	54	31	80	**46**	Strng	Marginal	28	13	**45**
1256	40th Ave S	Southcenter Blvd	S 154th Ln	Local	25	142	20	414	76	55	60	**69**	Mod	Good	18	7	**68**
1254	40th Ave S	S 154th Ln	DS@337S S 154th Ln	Local	25	337	47	983	88	69	60	**82**	Mod	V Good	11	2	**81**
1953	40th Pl S	NORTH END	S 119th St	Local	25	262	36	764	77	57	60	**70**	Mod	V Good	12	6	**70**
1178	41st Ave S	S 113th St	S 114th St	Local	26	240	35	728	78	59	60	**72**	Mod	V Good	14	8	**72**
1180	41st Ave S	S 130th St	S 131st Pl	Local	25	421	58	1,228	76	55	60	**69**	Mod	Good	20	4	**68**
1181	41st Ave S	NORTH END	S 139th St	Local	24	588	78	1,646	85	66	60	**78**	Mod	V Good	11	4	**78**
1517	42nd Ave S	S 115th St	S 116th St	Collector	34	152	29	603	59	55	60	**58**	Mod	Fair	30	11	**57**
1521	42nd Ave S	S 116th St	Pedestrian Bridge S 119th St Access	Collector	35	1,145	223	4,675	73	78	30	**75**	Weak	V Good	23	4	**74**
1557	42nd Ave S	Pedestrian Bridge S 119th St Access	S 122nd St	Collector	25	987	137	2,879	81	83	60	**82**	Mod	V Good	15	4	**81**
1195	42nd Ave S	S 122nd St	S 124th St	Collector	25	713	99	2,080	74	72	60	**73**	Mod	V Good	22	4	**73**
1647	42nd Ave S	S 124th St	Macadam Rd S	Collector	28	1,063	165	3,472	63	56	60	**61**	Mod	Good	29	8	**60**
1179	42nd Ave S	S 126th St	SE END	Local	25	164	23	478	91	73	60	**85**	Mod	V Good	7	2	**84**
1516	42nd Ave S	40th Ave S	S 139th St	Collector	25	794	110	2,316	59	71	60	**63**	Mod	Good	30	11	**63**
1196	42nd Ave S	S 139th St	S 140th St	Collector	26	281	41	852	89	70	60	**83**	Mod	V Good	8	3	**83**
1519	42nd Ave S	S 140th St	S 140th St	Collector	28	38	6	124	94	82	60	**90**	Mod	Excellent	0	6	**90**
1388	42nd Ave S	S 140th St	S 141st St	Collector	30	318	53	1,113	78	61	60	**72**	Mod	V Good	18	4	**72**
1530	42nd Ave S	S 141st St	S 142nd St	Collector	30	362	60	1,267	84	65	60	**78**	Mod	V Good	13	3	**78**
1663	42nd Ave S	S 142nd St	S 144th St	Collector	31	646	111	2,336	73	64	60	**70**	Mod	V Good	21	6	**70**
1515	42nd Ave S	S 144th St	S 146th St	Collector	31	666	115	2,409	55	67	60	**59**	Mod	Fair	32	13	**59**
1163	42nd Ave S	S 146th St	S 148th St	Collector	32	661	118	2,468	55	73	60	**61**	Mod	Good	31	14	**61**
1389	42nd Ave S	S 148th St	S 150th St	Collector	28	661	103	2,159	55	74	30	**62**	Weak	Good	34	11	**61**

City of Tukwila, WA

Street Inventory and Condition Summary - Sorted by Street Name

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1523	42nd Ave S	S 150th St	S 151st St	Collector	29	305	49	1,032	59	65	60	**61**	Mod	Good	30	11	**60**
1859	42nd Ave S	S 151st St	S 152nd St	Collector	28	362	56	1,183	54	75	60	**61**	Mod	Good	32	14	**60**
1860	42nd Ave S	S 152nd St	Southcenter Blvd	Collector	29	349	56	1,181	52	57	60	**53**	Mod	Fair	34	15	**53**
1648	42nd Ave S	Southcenter Blvd	S 158th St	Collector	28	1,648	256	5,383	75	69	60	**73**	Mod	V Good	16	5	**73**
1639	42nd Ave S	S 158th St	S 160th St	Collector	29	654	105	2,213	87	68	60	**81**	Mod	V Good	9	4	**81**
1964	43rd Ave S	S 122nd St	S 124th St	Local	25	713	99	2,080	73	56	60	**67**	Mod	Good	23	4	**67**
1962	43rd Ave S	Macadam Rd S	SOUTH END	Local	26	814	118	2,469	50	46	60	**49**	Mod	Marginal	37	13	**48**
1963	43rd Ave S	S 140th St	S 142nd St	Local	27	671	101	2,114	73	51	60	**65**	Mod	Good	20	7	**65**
1961	43rd Ave S	NORTH END	S 160th St	Local	29	352	57	1,191	80	61	60	**74**	Mod	V Good	10	10	**73**
1748	43rd Pl S	S 116th St	44th Ave S	Local	30	340	57	1,190	86	67	60	**80**	Mod	V Good	12	2	**79**
1972	43rd Pl S	S 137th St	S 137th Pl	Local	23	375	48	1,006	72	50	60	**65**	Mod	Good	22	6	**64**
1796	44th Ave S	43rd Pl S	S 118th St	Local	19	535	56	1,186	68	77	30	**71**	Weak	V Good	25	7	**70**
1793	44th Ave S	S 118th St	S 122nd St	Local	20	1,407	156	3,283	71	70	30	**71**	Weak	V Good	24	5	**71**
1789	44th Ave S	S 122nd St	S 124th St	Local	23	710	91	1,905	84	66	60	**78**	Mod	V Good	12	4	**78**
1795	44th Ave S	S 131st Pl	S 133rd St	Local	23	293	37	786	75	54	60	**68**	Mod	Good	17	8	**67**
1788	44th Ave S	S 137th St	S 139th St	Local	19	641	68	1,421	64	42	60	**56**	Mod	Fair	26	10	**56**
1790	44th Ave S	S 140th St	S 142nd St	Local	19	650	69	1,441	53	45	60	**50**	Mod	Fair	37	11	**50**
2021	44th Ave S	S 156th St	S 158th St	Local	19	475	50	1,053	94	84	60	**91**	Mod	Excellent	3	3	**90**
1260	44th Pl S	S 118th St	46th Ave S	Local	19	705	74	1,563	92	76	60	**86**	Mod	Excellent	7	1	**86**
1266	44th Pl S	46th Ave S	S 122nd St	Local	19	1,145	121	2,538	86	67	60	**80**	Mod	V Good	13	1	**79**
1897	45th Ave S	S 122nd St	S 124th St	Local	26	711	103	2,157	77	57	60	**70**	Mod	V Good	17	2	**70**
1399	45th Ave S	S 137th St	S 139th St	Local	26	766	111	2,324	70	47	60	**62**	Mod	Good	25	5	**62**
1247	45th Ave S	S 139th St	S 140th St	Local	23	209	27	561	79	60	60	**73**	Mod	V Good	16	5	**72**
1913	45th Ave S	NORTH END	S 163rd Pl	Local	23	434	55	1,165	62	40	60	**55**	Mod	Fair	30	9	**54**
1230	45th Pl S	S 136th St	S 137th St	Local	24	277	37	776	94	82	60	**90**	Mod	Excellent	1	5	**90**
1232	45th Pl S	S 163rd Pl	SOUTH END	Local	25	150	21	438	64	49	60	**59**	Mod	Fair	19	16	**59**
1217	45th Pl S	45th Pl S	DS@65S 45th Pl S	Local	26	65	9	197	95	84	60	**91**	Mod	Excellent	0	5	**91**
1231	45th Pl S	DS@65S 45th Pl S	45th Pl S	Local	25	60	8	175	88	69	60	**82**	Mod	V Good	4	7	**82**
1275	46th Ave S	44th Pl S	S 122nd St	Local	21	870	102	2,132	94	83	60	**90**	Mod	Excellent	4	2	**90**
1783	46th Ave S	S 122nd St	S 124th St	Local	23	712	91	1,911	75	55	60	**69**	Mod	Good	20	5	**68**
1274	46th Ave S	S 124th St	S 125th St	Local	24	176	23	493	88	69	60	**81**	Mod	V Good	10	2	**81**
1781	46th Ave S	S 144th St	S 146th St	Local	20	666	74	1,554	55	51	60	**54**	Mod	Fair	33	12	**53**
1782	46th Ave S	S 146th St	S 148th St	Local	20	659	73	1,538	49	49	60	**49**	Mod	Marginal	35	16	**48**
1277	46th Ave S	S 148th St	SOUTH END	Local	19	220	23	488	58	30	60	**48**	Mod	Marginal	36	6	**48**
1276	46th Ave S	NORTH END	S 150th St	Local	19	304	32	674	85	66	60	**79**	Mod	V Good	9	6	**78**
1836	46th Ave S	S 160th St	S 162nd St	Local	21	603	70	1,477	60	45	60	**55**	Mod	Fair	29	11	**54**
1914	46th Ave S	S 163rd Pl	S 162nd St	Local	25	132	18	385	72	50	60	**65**	Mod	Good	18	9	**65**
1828	47th Ave S	CITY LIMIT	S 104th Pl	Local	21	229	27	561	52	51	60	**52**	Mod	Fair	35	13	**51**
1385	47th Ave S	S 104th Pl	S 107th St	Local	22	744	91	1,910	43	52	60	**46**	Mod	Marginal	40	17	**45**
1832	47th Ave S	S Ryan Way	S 109th St	Local	22	642	78	1,648	73	51	60	**66**	Mod	Good	21	7	**65**
1856	47th Ave S	S 122nd St	S 124th St	Local	21	713	83	1,747	81	62	60	**75**	Mod	V Good	16	3	**74**
1383	47th Ave S	NE END	S 134th Pl	Local	25	292	41	852	54	25	60	**45**	Mod	Marginal	32	14	**44**
1142	47th Ave S	S 156th St	S 158th St	Local	26	510	74	1,547	91	74	60	**85**	Mod	Excellent	6	3	**85**
1840	47th Ave S	S 158th St	SOUTH END	Local	24	579	77	1,621	96	86	60	**92**	Mod	Excellent	1	3	**92**
1846	47th Ave S	S 160th St	S 162nd St	Local	25	608	84	1,773	66	39	60	**57**	Mod	Fair	23	11	**57**
1451	48th Ave S	S 122nd St	S 124th St	Local	19	714	75	1,583	89	70	60	**83**	Mod	V Good	8	3	**82**

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IMS Easy Street Analysis

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1110	48th Ave S	NE END	Interurban Ave S	Local	25	2,049	285	5,976	84	68	60	**78**	Mod	V Good	12	5	**78**
1109	48th Ave S	NE END	S 134th Pl	Local	23	118	15	317	96	86	60	**92**	Mod	Excellent	1	3	**92**
1111	48th Ave S	S 134th Pl	48th Pl S	Local	19	222	23	492	87	68	60	**81**	Mod	V Good	8	5	**80**
1449	48th Ave S	48th Pl S	Macadam Rd S	Local	19	437	46	969	76	56	60	**70**	Mod	Good	18	5	**69**
1452	48th Ave S	S 160th St	S 162nd St	Local	19	601	63	1,332	57	39	60	**51**	Mod	Fair	30	13	**50**
1448	48th Ave S	S 162nd St	SOUTH END	Local	19	165	17	366	51	42	60	**48**	Mod	Marginal	38	11	**48**
1051	48th Pl S	48th Ave S	S 136th St	Local	19	291	31	645	78	59	60	**72**	Mod	V Good	19	3	**71**
1048	48th Pl S	S 146th St	S 145th St	Local	19	240	25	532	98	89	60	**95**	Mod	Excellent	0	2	**94**
1047	48th Pl S	S 145th St	NW END	Local	24	191	25	535	69	45	60	**61**	Mod	Good	26	5	**61**
1049	48th Pl S	DS@85N 48th Pl S	48th Pl S	Local	24	89	12	249	59	33	60	**50**	Mod	Fair	28	13	**49**
1050	48th Pl S	48th Pl S	DS@85N 48th Pl S	Local	25	85	12	248	97	88	60	**94**	Mod	Excellent	0	3	**93**
1699	49th Ave S	S 107th St	S 114th St	Local	25	2,254	313	6,574	88	70	60	**82**	Mod	V Good	9	3	**82**
1667	49th Ave S	S 122nd St	S 124th St	Local	26	714	103	2,166	86	67	60	**80**	Mod	V Good	10	4	**80**
1666	49th Ave S	NORTH END	S 164th St	Local	27	405	61	1,276	57	30	60	**48**	Mod	Marginal	30	14	**47**
1808	50th Ave S	NORTH END	S 112th St	Local	19	273	29	605	74	54	60	**68**	Mod	Good	21	5	**67**
1809	50th Ave S	51st Pl S	S 122nd Ln	Local	20	499	55	1,164	86	67	60	**79**	Mod	V Good	12	3	**79**
1386	50th Pl S	S 124th St	S 125th St	Collector	35	257	50	1,049	49	53	60	**50**	Mod	Fair	31	20	**49**
1146	50th Pl S	S 125th St	S 130th Pl	Collector	35	977	190	3,989	45	71	60	**54**	Mod	Fair	40	15	**53**
1950	51st Ave S	NORTH END	S 138th St	Local	22	722	88	1,853	84	65	60	**78**	Mod	V Good	11	5	**77**
1199	51st Ave S	S 138th St	S 139th St	Local	20	338	38	789	52	35	60	**46**	Mod	Marginal	35	13	**46**
1200	51st Ave S	S 139th St	SOUTH END	Local	21	487	57	1,193	73	53	60	**66**	Mod	Good	20	7	**66**
1044	51st Ave S	S 144th St	S 151st St	Collector	35	2,319	451	9,469	48	63	60	**53**	Mod	Fair	40	11	**52**
1951	51st Ave S	S 151st St	S 152nd St	Collector	35	329	64	1,343	57	64	60	**59**	Mod	Fair	32	11	**59**
1952	51st Ave S	S 152nd St	Southcenter Blvd	Collector	34	569	107	2,257	63	78	30	**68**	Weak	Good	28	9	**68**
1653	51st Ave S	Southcenter Blvd	SR 518 Ramp	Minor Arterial	30	291	49	1,019	52	66	60	**56**	Mod	Fair	28	20	**56**
2058	51st Ave S	SR 518 Ramp	I-5 Ramp	Minor Arterial	30	279	47	977	47	67	60	**54**	Mod	Fair	38	15	**53**
2051	51st Ave S	SR 518	SR 518 Ramp	Minor Arterial	30	192	32	672	62	57	60	**60**	Mod	Good	26	12	**60**
1046	51st Ave S	NORTH END	S 159th St	Local	25	424	59	1,237	57	33	60	**49**	Mod	Marginal	28	15	**49**
1045	51st Ave S	S 160th St	S 161st St	Collector	35	284	55	1,160	61	46	60	**56**	Mod	Fair	29	10	**56**
1949	51st Ave S	S 161st St	S 163rd Pl	Collector	35	702	137	2,867	69	83	30	**74**	Weak	V Good	22	9	**73**
1201	51st Ave S	S 163rd Pl	S 164th St	Collector	35	200	39	817	65	66	60	**66**	Mod	Good	23	12	**65**
1202	51st Ave S	S 164th St	S 166th St	Collector	35	621	121	2,536	70	75	60	**72**	Mod	V Good	23	7	**71**
1700	51st Pl S	S 122nd St	50th Ave S	Local	20	199	22	464	99	90	60	**96**	Mod	Excellent	0	1	**95**
1670	51st Pl S	50th Ave S	S 122nd Ln	Local	20	586	65	1,367	82	63	60	**76**	Mod	V Good	15	4	**75**
2099	51st Pl S	S 122nd Ln	S 124th St	Local	20	128	14	299	80	61	60	**74**	Mod	V Good	18	2	**73**
1060	51st Pl S	S 124th St	SE END	Local	20	815	91	1,902	72	54	60	**66**	Mod	Good	24	4	**65**
1326	52nd Ave S	Interurban Ave S	53rd Ave S	Local	20	288	32	672	86	68	60	**80**	Mod	V Good	8	5	**80**
1324	52nd Ave S	53rd Ave S	S 136th St	Local	22	268	33	688	63	56	60	**60**	Mod	Good	23	15	**60**
1331	52nd Ave S	S 136th St	S 137th St	Local	22	294	36	755	54	53	60	**54**	Mod	Fair	33	13	**53**
1328	52nd Ave S	S 137th St	S 138th St	Local	22	261	32	670	25	34	60	**28**	Mod	Poor	55	19	**28**
1325	52nd Ave S	NORTH END	S 142nd St	Local	22	269	33	690	75	54	60	**68**	Mod	Good	14	11	**68**
1330	52nd Ave S	S 142nd St	SOUTH END	Local	22	333	41	855	89	70	60	**83**	Mod	V Good	10	1	**82**
1327	52nd Ave S	S 151st St	Southcenter Blvd	Local	21	914	107	2,239	81	62	60	**75**	Mod	V Good	15	4	**74**
1329	52nd Ave S	NORTH END	S 164th St	Local	21	173	20	424	78	58	60	**71**	Mod	V Good	14	8	**71**
1594	52nd Pl S	52nd Ave S	S 137th St	Local	21	261	30	639	55	51	60	**54**	Mod	Fair	32	13	**53**
1115	53rd Ave S	52nd Ave S	S 136th St	Local	21	274	32	671	74	53	60	**67**	Mod	Good	15	11	**67**

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1889	53rd Ave S	S 136th St	S 137th St	Local	21	213	25	522	63	33	60	**53**	Mod	Fair	25	12	**52**
1117	53rd Ave S	S 137th St	S 139th St	Collector	35	484	94	1,976	100	90	60	**97**	Mod	Excellent	0	0	**96**
1890	53rd Ave S	S 139th St	S 140th St	Collector	35	303	59	1,237	100	90	60	**97**	Mod	Excellent	0	0	**96**
1174	53rd Ave S	S 140th St	S 142nd St	Collector	34	621	117	2,463	99	90	60	**96**	Mod	Excellent	1	0	**95**
1891	53rd Ave S	S 142nd St	S 144th St	Collector	33	787	144	3,030	83	64	60	**77**	Mod	V Good	11	6	**76**
2163	53rd Ave S	Southcenter Blvd	DS@355S Southcenter Blvd	Local	22	355	43	911	74	52	60	**66**	Mod	Good	17	9	**66**
1112	53rd Ave S	Klickitat Dr	S 159th St	Collector	27	519	78	1,635	64	59	60	**62**	Mod	Good	25	11	**62**
1114	53rd Ave S	S 159th St	S 160th St	Collector	28	552	86	1,803	67	57	60	**64**	Mod	Good	21	12	**63**
1116	53rd Ave S	S 166th St	S 170th St	Local	22	1,112	136	2,854	62	58	60	**61**	Mod	Good	29	9	**60**
1113	53rd Ave S	S 170th St	S 172nd Ln	Local	22	863	105	2,215	70	57	60	**66**	Mod	Good	21	9	**65**
1736	53rd Pl S	Slade Way	53rd Pl S SPUR	Local	22	410	50	1,052	66	53	60	**62**	Mod	Good	23	10	**61**
1684	53rd Pl S	53rd Pl S SPUR	53rd Pl S SPUR	Local	36	48	10	202	51	61	60	**54**	Mod	Fair	31	18	**54**
1683	53rd Pl S	53rd Pl S SPUR	SW END	Local	21	168	20	412	77	58	60	**71**	Mod	V Good	18	5	**70**
1250	53rd Pl S	53rd Pl S	53rd Pl S	Local	21	151	18	370	71	48	60	**63**	Mod	Good	20	9	**63**
1971	53rd Pl S SPUR	53rd Pl S	53rd Pl S	Local	21	176	21	431	63	42	60	**56**	Mod	Fair	25	11	**56**
1487	54th Ave S	Slade Way	S 166th St	Local	22	965	118	2,477	48	47	60	**47**	Mod	Marginal	36	16	**94**
1475	55th Ave S	S 140th St	S 144th St	Local	20	1,418	158	3,309	48	45	60	**47**	Mod	Marginal	34	18	**46**
1407	56th Ave S	S 130th Pl	S 133rd St	Local	20	784	87	1,829	83	64	60	**77**	Mod	V Good	11	6	**76**
1409	56th Ave S	S 133rd St	Interurban Ave S	Local	20	1,195	133	2,788	71	55	60	**65**	Mod	Good	22	8	**65**
1408	56th Ave S	S 137th St	56th Pl S	Local	20	761	85	1,776	52	61	60	**55**	Mod	Fair	35	13	**54**
1411	56th Ave S	S 139th St	S 141st St	Local	20	712	79	1,661	56	43	60	**52**	Mod	Fair	28	16	**51**
1410	56th Ave S	S 141st St	S 144th St	Local	21	1,048	122	2,568	62	51	60	**59**	Mod	Fair	27	10	**58**
1406	56th Ave S	S 144th St	S 147th St	Local	21	1,016	119	2,489	73	62	60	**69**	Mod	Good	18	9	**69**
1992	56th Pl S	56th Ave S	S 141st St	Local	21	768	90	1,882	64	52	60	**61**	Mod	Good	26	10	**60**
1569	57th Ave S	S 130th Pl	Pamela Dr	Local	21	378	44	926	91	72	60	**84**	Mod	V Good	7	2	**84**
1570	57th Ave S	Pamela Dr	S 133rd St	Local	21	335	39	821	81	62	60	**75**	Mod	V Good	15	4	**74**
2162	57th Ave S	SW END	Interurban Ave S	Local	22	199	24	511	60	27	60	**49**	Mod	Marginal	31	9	**48**
1568	57th Ave S	S 141st St	S 142nd St	Local	22	319	39	819	53	52	60	**53**	Mod	Fair	35	12	**52**
1402	57th Ave S	S 142nd St	S 144th St	Local	22	668	82	1,715	62	51	60	**58**	Mod	Fair	28	11	**57**
1403	57th Ave S	S 144th St	S 147th St	Local	23	975	125	2,616	37	47	60	**40**	Mod	Marginal	40	16	**40**
1572	57th Ave S	S 147th St	S 149th St	Local	23	518	66	1,390	88	69	60	**81**	Mod	V Good	9	4	**81**
1567	57th Ave S	S 149th St	S 150th Pl	Local	23	533	68	1,430	82	63	60	**76**	Mod	V Good	14	4	**75**
1566	57th Ave S	S 150th Pl	SOUTH END	Local	23	232	30	623	63	44	60	**57**	Mod	Fair	28	9	**56**
1571	57th Ave S	S 152nd St	S 152nd Pl	Local	23	320	41	859	51	33	60	**45**	Mod	Marginal	33	17	**44**
1226	58th Ave S	Interurban Ave S	59th Ave S	Collector	35	577	112	2,356	66	43	60	**58**	Mod	Fair	24	10	**57**
1227	58th Ave S	59th Ave S	S 144th St	Collector	35	668	130	2,728	56	64	60	**59**	Mod	Fair	31	11	**58**
1224	58th Ave S	S 144th St	S 147th St	Collector	35	975	190	3,981	64	68	60	**66**	Mod	Good	25	11	**65**
1225	58th Ave S	S 147th St	SOUTH END	Local	20	1,113	124	2,597	87	68	60	**80**	Mod	V Good	11	2	**80**
1362	59th Aly S	S 147th St	SOUTH END	Local	19	643	68	1,425	64	36	60	**55**	Mod	Fair	29	7	**54**
1738	59th Ave S	S 142nd St	S 144th St	Local	20	928	103	2,165	63	48	60	**58**	Mod	Fair	27	10	**57**
1644	59th Ave S	S 144th St	S 147th St	Local	21	997	116	2,443	62	39	60	**54**	Mod	Fair	26	12	**53**
1824	59th Ave S	S 147th St	S 149th St	Local	22	611	75	1,568	73	57	60	**68**	Mod	Good	20	7	**67**
1969	61st Ave S	Southcenter Blvd	Tukwila Pkwy	Minor Arterial	40	587	130	2,739	45	59	30	**50**	Weak	Marginal	46	10	**49**
1095	62nd Ave S	59th Ave S	S 149th St	Collector	33	816	150	3,142	59	71	60	**63**	Mod	Good	25	16	**62**
1093	62nd Ave S	S 149th St	S 149th Pl	Collector	35	278	54	1,135	67	67	60	**68**	Mod	Good	21	11	**67**
1094	62nd Ave S	S 149th Pl	S 151st St	Collector	34	416	79	1,650	68	69	60	**68**	Mod	Good	22	11	**68**

City of Tukwila, WA

Street Inventory and Condition Summary - Sorted by Street Name

IMS Easy Street Analysis

GISID	On Street	From Street	To Street	FunCL	Pavement Width (ft)	Pavement Length (ft)	Add Area (yd2)	Pavement Area (yd2)	Condition Summary: Surface Distress Index (SDI)	Roughness Index (RI)	Structural Index (SI)	Pavement Cndtn Index (PCI)	Strength Rating	Condition Rating	Load Assoc Distress Deducts (LADD)	Non-Load Distress Deducts (NLAD)	Current Segment PCI (CPCI)
1004	62nd Ave S	S 151st St	DS@131S S 151st St	Local	20	131	15	306	25	24	60	**25**	Mod	V Poor	51	23	**24**
1096	62nd Ave S	S 153rd St	Sunwood Blvd	Local	20	158	18	369	83	64	60	**76**	Mod	V Good	7	11	**76**
1091	62nd Ave S	Sunwood Blvd	Southcenter Blvd	Local	20	750	83	1,750	68	49	60	**61**	Mod	Good	21	11	**61**
1558	63rd Pl S	S 151st St	S 151st Pl	Local	22	174	21	447	74	52	60	**67**	Mod	Good	16	10	**66**
1216	64th Ave S	S 153rd St	SOUTH END	Local	22	321	39	824	84	65	60	**78**	Mod	V Good	10	6	**77**
1041	65th Ave S	S 151st St	S 153rd St	Collector	35	916	178	3,740	78	74	60	**77**	Mod	V Good	13	9	**76**
1198	65th Ave S	S 153rd St	S 153rd St	Collector	34	128	24	508	80	71	60	**77**	Mod	V Good	12	8	**77**
1040	65th Ave S	S 153rd St	Southcenter Blvd	Collector	35	951	185	3,883	57	56	60	**57**	Mod	Fair	32	11	**56**
1955	66th Ave S	Southcenter Blvd	I-405 Ramp	Minor Arterial	35	246	48	1,005	66	40	60	**58**	Mod	Fair	24	10	**57**
1640	Airport Way S	Boeing Access Rd	Airport Way S	Minor Arterial	32	625	111	2,333	42	68	60	**51**	Mod	Fair	38	20	**50**
1514	Airport Way S	CITY LIMIT	Boeing Access Rd	Minor Arterial	30	1,068	178	3,738	46	69	60	**54**	Mod	Fair	37	17	**53**
1709	Andover Park E	Tukwila Pkwy	Evans Black Dr	Minor Arterial	30	782	130	2,737	78	59	60	**71**	Mod	V Good	18	4	**71**
1712	Andover Park E	Evans Black Dr	Baker Blvd	Minor Arterial	30	465	78	1,628	88	76	60	**84**	Mod	V Good	10	2	**84**
1708	Andover Park E	Baker Blvd	Strander Blvd	Minor Arterial	30	876	146	3,066	74	64	60	**71**	Mod	V Good	19	6	**70**
1710	Andover Park E	Strander Blvd	Treck Dr	Minor Arterial	30	715	119	2,503	72	60	60	**68**	Mod	Good	18	7	**67**
1711	Andover Park E	Treck Dr	Minkler Blvd	Minor Arterial	32	1,934	344	7,220	64	77	60	**69**	Mod	Good	25	11	**68**
1714	Andover Park E	Minkler Blvd	Costco Dr	Minor Arterial	32	1,473	262	5,499	63	80	60	**69**	Mod	Good	24	12	**69**
1713	Andover Park E	Costco Dr	S 180th St	Minor Arterial	32	1,022	182	3,815	70	66	60	**69**	Mod	Good	18	12	**68**
2062	Andover Park W	Tukwila Pkwy	Southcenter Mall	Minor Arterial	32	327	58	1,221	66	61	60	**65**	Mod	Good	26	8	**64**
1984	Andover Park W	Southcenter Mall	Baker Blvd	Minor Arterial	32	843	150	3,147	63	71	60	**66**	Mod	Good	27	10	**65**
1902	Andover Park W	Baker Blvd	Strander Blvd	Minor Arterial	32	871	155	3,252	83	64	60	**77**	Mod	V Good	6	11	**76**
1901	Andover Park W	Strander Blvd	Corporate Dr N	Minor Arterial	33	1,852	340	7,130	61	62	60	**62**	Mod	Good	28	11	**61**
1240	Andover Park W	Corporate Dr N	Corporate Dr S	Minor Arterial	33	518	95	1,994	61	63	60	**62**	Mod	Good	20	12	**61**
1983	Andover Park W	Corporate Dr S	Minkler Blvd	Minor Arterial	33	235	43	905	61	48	60	**57**	Mod	Fair	25	14	**56**
1979	Andover Park W	Minkler Blvd	Minkler Blvd	Minor Arterial	33	51	9	196	65	41	60	**57**	Mod	Fair	20	15	**56**
1980	Andover Park W	Minkler Blvd	Upland Dr	Minor Arterial	33	421	77	1,621	64	58	60	**62**	Mod	Good	25	11	**61**
1237	Andover Park W	Upland Dr	Midland Dr	Collector	35	756	147	3,087	61	73	60	**65**	Mod	Good	23	16	**65**
1982	Andover Park W	Midland Dr	Triland Dr	Minor Arterial	30	845	141	2,958	80	79	30	**79**	Weak	V Good	16	4	**79**
1238	Andover Park W	Triland Dr	S 180th St	Minor Arterial	30	620	103	2,170	66	64	60	**66**	Mod	Good	23	11	**65**
1694	B Line	Southcenter Pkwy	C Line	Local	20	271	30	632	63	40	60	**55**	Mod	Fair	32	5	**54**
1042	Baker Blvd	Andover Park W	Andover Park E	Local	20	1,080	120	2,520	42	66	60	**50**	Mod	Marginal	41	17	**49**
1102	Baker Blvd	Andover Park E	Christensen Rd	Local	20	343	38	800	47	45	60	**47**	Mod	Marginal	41	12	**46**
1632	Beacon Ave S	S Ryan Way	S 107th St	Local	22	943	115	2,420	57	52	60	**55**	Mod	Fair	32	10	**54**
1838	Beacon Ave S	S 107th St	S 109th St	Local	22	711	87	1,825	100	90	60	**97**	Mod	Excellent	0	0	**96**
1751	Boeing Access Rd	East Marginal Way S	Boeing Access Rd	Principal Arterial	44	592	145	3,039	67	64	60	**66**	Mod	Good	25	8	**65**
1752	Boeing Access Rd	East Marginal Way S	DS@220E East Marginal Way S	Principal Arterial	44	220	54	1,129	32	56	30	**40**	Weak	Poor	58	10	**39**
1753	Boeing Access Rd	DS@220E East Marginal Way S	Airport Way S	Principal Arterial	44	113	28	580	44	60	60	**49**	Mod	Marginal	38	18	**49**
1977	Boeing Access Rd	Airport Way S	Airport Way S	Principal Arterial	44	330	81	1,694	38	71	60	**49**	Mod	Marginal	42	20	**48**
1976	Boeing Access Rd	East Marginal Way S	East Marginal Way S	Principal Arterial	44	176	43	903	82	63	60	**76**	Mod	V Good	14	4	**75**
1749	Boeing Access Rd	Airport Way S	Airport Way S	Principal Arterial	44	224	55	1,150	48	73	60	**57**	Mod	Fair	36	16	**56**
1978	Boeing Access Rd	Airport Way S	Airport Way S	Principal Arterial	44	377	92	1,935	45	75	30	**55**	Weak	Fair	40	14	**54**
1754	Boeing Access Rd	I-5 Ramp	Airport Way S	Principal Arterial	44	168	41	862	57	59	60	**58**	Mod	Fair	27	15	**57**
1750	Boeing Access Rd	I-5 Ramp	I-5 Ramp	Principal Arterial	44	371	91	1,904	42	65	60	**50**	Mod	Fair	40	17	**49**
1755	Boeing Access Rd	I-5 Ramp	Martin L King Jr Ramp	Principal Arterial	42	395	92	1,936	40	76	60	**52**	Mod	Fair	36	24	**52**
1975	Boeing Access Rd	Martin L King Jr Ramp	Martin L King Jr Way S	Principal Arterial	44	292	71	1,499	33	43	60	**36**	Mod	Poor	45	18	**35**
1772	C Line	UnNamed-01534	Southcenter Pkwy	Local	20	730	81	1,703	63	59	60	**62**	Mod	Good	26	11	**61**

City of Tukwila, WA

Street Inventory and Condition Summary - Sorted by Street Name

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1698	Cascade Ave S	Riverside Dr	Todd Blvd	Local	20	864	96	2,016	66	60	60	**64**	Mod	Good	21	12	**64**
1697	Cascade Ave S	Todd Blvd	S Glacier St	Local	20	738	82	1,722	76	73	60	**75**	Mod	V Good	14	9	**75**
1734	Christensen Rd	NORTH END	Baker Blvd	Local	20	1,253	139	2,924	49	61	60	**53**	Mod	Fair	35	17	**52**
1175	Christensen Rd	Baker Blvd	Christensen Rd	Local	19	249	26	552	60	45	60	**55**	Mod	Fair	31	8	**55**
1395	Christensen Rd	Christensen Rd	Christensen Rd	Local	19	82	9	182	90	70	60	**83**	Mod	V Good	4	6	**83**
1177	Christensen Rd	Christensen Rd	Christensen Rd	Local	19	82	9	182	87	68	60	**80**	Mod	V Good	9	4	**80**
1176	Christensen Rd	Strander Blvd	Christensen Rd	Local	19	802	85	1,778	56	34	60	**49**	Mod	Marginal	32	12	**48**
1150	Corporate Dr N	WEST END	Andover Park W	Local	19	424	45	940	86	67	60	**80**	Mod	V Good	9	5	**79**
1149	Corporate Dr N	Corporate Dr N	Corporate Dr N	Local	19	206	22	457	84	65	60	**78**	Mod	V Good	13	3	**77**
1577	Corporate Dr S	Corporate Dr S	Corporate Dr S	Local	20	203	23	474	69	46	60	**62**	Mod	Good	16	15	**61**
1249	Corporate Dr S	WEST END	Andover Park W	Local	20	427	47	996	79	59	60	**72**	Mod	V Good	10	11	**72**
1001	Costco Dr	Andover Park E	DS@280E Andover Park E	Local	20	280	31	653	61	43	60	**55**	Mod	Fair	28	11	**55**
1162	East Marginal Way S	CITY LIMIT	S 81st Pl	Principal Arterial	44	723	177	3,711	56	75	30	**62**	Weak	Good	34	10	**61**
1428	East Marginal Way S	S 81st Pl	S 87th Pl	Principal Arterial	44	2,601	636	13,352	64	78	60	**69**	Mod	Good	24	11	**68**
1997	East Marginal Way S	S 87th Pl	S 90th St	Principal Arterial	44	524	128	2,690	70	79	30	**73**	Weak	V Good	23	6	**73**
1157	East Marginal Way S	S 90th St	S 94th Pl	Principal Arterial	44	1,667	407	8,557	64	76	30	**68**	Weak	Good	29	7	**67**
1531	East Marginal Way S	S 94th Pl	S 96th Pl	Principal Arterial	44	718	176	3,686	69	72	60	**70**	Mod	V Good	23	8	**69**
1882	East Marginal Way S	S 96th Pl	S Norfolk St	Principal Arterial	44	1,742	426	8,942	44	72	60	**54**	Mod	Fair	38	15	**53**
1528	East Marginal Way S	S Norfolk St	S 102nd St	Principal Arterial	44	386	94	1,981	52	81	60	**62**	Mod	Good	31	18	**61**
1874	East Marginal Way S	S 102nd St	S 104th St	Principal Arterial	44	587	143	3,013	54	83	30	**64**	Weak	Good	33	13	**63**
1165	East Marginal Way S	S 104th St	DS@507S S 104th St	Principal Arterial	44	507	124	2,603	55	74	60	**61**	Mod	Good	32	13	**61**
1881	East Marginal Way S	DS@507S S 104th St	Boeing Access Rd	Principal Arterial	44	314	77	1,612	63	80	30	**69**	Weak	Good	27	10	**69**
1864	East Marginal Way S	East Marginal Way S	Tukwila Intl Blvd	Local	19	747	79	1,656	54	76	30	**61**	Weak	Good	36	10	**61**
1877	East Marginal Way S	Boeing Access Rd	Tukwila Intl Blvd	Principal Arterial	43	242	58	1,214	57	76	30	**63**	Weak	Good	35	8	**63**
1009	East Marginal Way S	Tukwila Intl Blvd	Tukwila Intl Blvd	Principal Arterial	44	82	20	421	62	65	60	**63**	Mod	Good	30	8	**63**
1423	East Marginal Way S	Tukwila Intl Blvd	Boeing Access Rd	Principal Arterial	44	52	13	267	93	79	60	**88**	Mod	Excellent	6	2	**88**
1008	East Marginal Way S	Boeing Access Rd	Tukwila Intl Blvd	Minor Arterial	30	197	33	690	66	53	60	**61**	Mod	Good	30	4	**61**
1883	East Marginal Way S	Tukwila Intl Blvd	Boeing Access Rd	Local	30	309	52	1,082	53	48	60	**52**	Mod	Fair	33	14	**51**
1010	East Marginal Way S	Tukwila Intl Blvd	S 112th St	Minor Arterial	30	1,358	226	4,753	44	64	60	**50**	Mod	Fair	43	14	**50**
1427	East Marginal Way S	S 112th St	S 115th St	Minor Arterial	30	713	119	2,496	45	70	60	**53**	Mod	Fair	38	17	**53**
1869	East Marginal Way S	S 115th St	S 116th St	Minor Arterial	30	671	112	2,349	43	69	60	**52**	Mod	Fair	40	17	**51**
1687	East Marginal Way S	S 116th St	Interurban Ave S	Minor Arterial	30	392	65	1,372	38	69	60	**49**	Mod	Marginal	33	13	**48**
2092	East Marginal Way S	Interurban Ave S	SR 599	Minor Arterial	30	312	52	1,092	53	30	60	**45**	Mod	Marginal	36	11	**45**
2086	East Marginal Way S	SR 599	S 120th Pl	Minor Arterial	30	603	101	2,111	70	62	60	**67**	Mod	Good	22	8	**67**
1391	East Marginal Way S	S 120th Pl	S 124th St	Minor Arterial	30	1,254	209	4,389	68	79	30	**71**	Weak	V Good	26	6	**71**
1875	East Marginal Way S	S 124th St	S 126th St	Minor Arterial	30	899	150	3,147	70	76	60	**72**	Mod	V Good	22	8	**72**
1160	East Marginal Way S	S 126th St	S 128th St	Minor Arterial	30	353	59	1,236	55	72	60	**60**	Mod	Good	29	16	**60**
1868	East Marginal Way S	S 128th St	S 128th St	Minor Arterial	30	170	28	595	49	64	60	**54**	Mod	Fair	31	20	**54**
1866	East Marginal Way S	S 128th St	S 130th St	Minor Arterial	30	519	87	1,817	56	60	60	**58**	Mod	Fair	30	14	**57**
1158	East Marginal Way S	S 130th St	40th Ave S	Minor Arterial	30	113	19	396	57	48	60	**54**	Mod	Fair	29	14	**54**
1426	East Marginal Way S	40th Ave S	S 133rd St	Minor Arterial	30	893	149	3,126	56	56	60	**56**	Mod	Fair	31	13	**56**
1508	Evans Black Dr	WEST END	Andover Park E	Local	30	567	95	1,985	88	69	60	**81**	Mod	V Good	9	4	**81**
1954	Fort Dent Way	Interurban Ave S	Starfire Way	Local	29	688	111	2,328	71	54	60	**65**	Mod	Good	22	7	**65**
1510	Fun Center Way	Interurban Ave S	DS@447E Interurban Ave S	Local	22	447	55	1,147	80	61	60	**73**	Mod	V Good	14	6	**73**
1364	Fun Center Way	DS@447E Interurban Ave S	SW Grady Way	Local	20	112	12	261	55	34	60	**48**	Mod	Marginal	30	15	**48**
1696	Gateway Dr	Interurban Ave S	S 133rd St	Local	21	2,527	295	6,191	74	71	60	**73**	Mod	V Good	19	6	**73**

City of Tukwila, WA

Street Inventory and Condition Summary - Sorted by Street Name

GISID	On Street	From Street	To Street	FunCL	Pavement Width (ft)	Pavement Length (ft)	Add Area (yd2)	Pavement Area (yd2)	Condition Summary: Surface Distress Index (SDI)	Roughness Index (RI)	Structural Index (SI)	Pavement Cndtn Index (PCI)	Strength Rating	Condition Rating	Load Assoc Distress Deducts (LADD)	Non-Load Distress Deducts (NLAD)	Current Segment PCI (CPCI)
1494	Glacier St	WEST END	Olympic Ave S	Local	27	250	38	788	88	69	60	**81**	Mod	V Good	8	4	**81**
1405	Glacier St	Olympic Ave S	Cascade Ave S	Local	26	609	88	1,847	79	77	60	**79**	Mod	V Good	14	6	**78**
1551	Grady Way	Interurban Ave S	Interurban Ave S	Local	27	154	23	485	47	57	60	**51**	Mod	Fair	38	15	**50**
1346	Grady Way	Interurban Ave S	Fun Center Way	Minor Arterial	45	117	29	614	55	59	60	**56**	Mod	Fair	34	11	**56**
1002	Industry Dr	Andover Park E	DS@355E Andover Park E	Local	22	355	43	911	68	65	60	**67**	Mod	Good	19	12	**67**
1994	Interurban Ave S	East Marginal Way S	40th Ave S	Minor Arterial	30	1,013	169	3,546	47	78	30	**57**	Weak	Fair	38	15	**57**
1159	Interurban Ave S	40th Ave S	Macadam Rd S	Minor Arterial	30	2,868	478	10,038	45	84	60	**58**	Mod	Fair	36	19	**57**
1998	Interurban Ave S	Macadam Rd S	Gateway Dr	Minor Arterial	30	997	166	3,490	47	66	60	**53**	Mod	Fair	36	17	**52**
1218	Interurban Ave S	Gateway Dr	SR 599 Ramp	Minor Arterial	30	500	83	1,750	59	80	60	**66**	Mod	Good	27	14	**65**
1164	Interurban Ave S	SR 599 Ramp	S 133rd St	Minor Arterial	30	284	47	994	68	69	60	**69**	Mod	Good	21	11	**68**
1879	Interurban Ave S	S 133rd St	SR 599 Ramp	Minor Arterial	30	276	46	966	60	67	60	**63**	Mod	Good	27	11	**62**
1161	Interurban Ave S	SR 599 Ramp	48th Ave S	Minor Arterial	30	767	128	2,685	66	71	60	**68**	Mod	Good	23	11	**67**
1559	Interurban Ave S	48th Ave S	I-5 Ramp	Principal Arterial	55	127	39	815	61	36	60	**53**	Mod	Fair	24	15	**52**
1873	Interurban Ave S	I-5 Ramp	I-5 Ramp	Principal Arterial	55	573	175	3,677	52	59	60	**54**	Mod	Fair	35	13	**54**
1878	Interurban Ave S	I-5 Ramp	56th Ave S	Principal Arterial	55	607	185	3,895	55	65	60	**58**	Mod	Fair	30	15	**57**
1871	Interurban Ave S	56th Ave S	S 140th St	Principal Arterial	55	2,142	655	13,745	42	72	30	**52**	Weak	Fair	47	11	**51**
1880	Interurban Ave S	S 140th St	58th Ave S	Principal Arterial	55	829	253	5,319	49	63	60	**54**	Mod	Fair	36	15	**53**
1167	Interurban Ave S	58th Ave S	S 143rd St	Principal Arterial	56	615	191	4,018	49	59	60	**53**	Mod	Fair	34	17	**52**
1011	Interurban Ave S	S 143rd St	S 143rd Pl	Principal Arterial	56	339	105	2,215	63	71	60	**66**	Mod	Good	27	11	**65**
1424	Interurban Ave S	S 143rd Pl	S 144th St	Principal Arterial	56	344	107	2,247	91	90	60	**90**	Mod	Excellent	6	4	**90**
1870	Interurban Ave S	S 144th St	S 147th St	Principal Arterial	56	916	285	5,985	82	79	60	**81**	Mod	V Good	14	5	**80**
1865	Interurban Ave S	S 147th St	S 149th St	Principal Arterial	56	604	188	3,946	79	67	60	**75**	Mod	V Good	16	6	**74**
1999	Interurban Ave S	S 149th St	I-405 Ramp	Principal Arterial	56	1,953	608	12,760	70	71	60	**71**	Mod	V Good	22	7	**70**
1392	Interurban Ave S	I-405 Ramp	DS@490E I-405 Ramp	Principal Arterial	56	490	152	3,201	47	51	60	**48**	Mod	Marginal	44	9	**47**
1867	Interurban Ave S	DS@490E I-405 Ramp	Fun Center Way	Principal Arterial	56	125	39	817	64	58	60	**62**	Mod	Good	28	8	**61**
1996	Interurban Ave S	Interurban Ave S	Southcenter Blvd	Local	22	387	47	993	57	58	60	**57**	Mod	Fair	32	11	**57**
1562	Interurban Ave S	Fun Center Way	SW Grady Way	Principal Arterial	55	231	71	1,482	56	50	60	**54**	Mod	Fair	32	12	**53**
1872	Interurban Ave S	SW Grady Way	West Valley Hwy	Principal Arterial	55	141	43	905	43	60	60	**48**	Mod	Marginal	39	19	**48**
1876	Interurban Ave S	West Valley Hwy	SW Grady Way	Local	22	164	20	421	50	39	60	**46**	Mod	Marginal	32	18	**46**
1839	Interurban Pl S	40th Ave S	SE END	Local	22	478	58	1,227	81	62	60	**75**	Mod	V Good	15	4	**74**
1397	Klickitat Dr	51st Ave S	53rd Ave S	Minor Arterial	30	877	146	3,070	71	71	30	**71**	Weak	V Good	25	4	**70**
1248	Klickitat Dr	53rd Ave S	I-5 Ramp	Minor Arterial	30	1,089	182	3,812	55	83	30	**65**	Weak	Good	34	11	**64**
1398	Klickitat Dr	I-5 Ramp	Southcenter Pkwy	Minor Arterial	30	1,052	175	3,682	54	63	60	**57**	Mod	Fair	30	14	**56**
1375	Longacres Way	West Valley Hwy	Nelsen Pl	Local	22	400	49	1,027	85	66	60	**78**	Mod	V Good	9	6	**78**
1948	Macadam Rd S	Interurban Ave S	SR 599	Collector	35	123	24	502	48	28	60	**41**	Mod	Marginal	35	17	**41**
1316	Macadam Rd S	SR 599	SR 599	Collector	35	104	20	425	74	63	60	**70**	Mod	V Good	19	7	**70**
1947	Macadam Rd S	SR 599	S 128th St	Collector	35	192	37	784	75	55	60	**68**	Mod	Good	20	5	**68**
1312	Macadam Rd S	S 128th St	S 130th St	Collector	35	271	53	1,107	87	68	60	**81**	Mod	V Good	8	4	**80**
1495	Macadam Rd S	S 130th St	S 131st Pl	Collector	35	531	103	2,168	79	71	60	**76**	Mod	V Good	17	5	**76**
1314	Macadam Rd S	S 131st Pl	S 133rd St	Collector	35	534	104	2,181	73	63	60	**70**	Mod	Good	22	5	**69**
1946	Macadam Rd S	S 133rd St	43rd Ave S	Collector	35	338	66	1,380	69	63	60	**67**	Mod	Good	24	7	**67**
1317	Macadam Rd S	43rd Ave S	S 136th St	Collector	35	1,710	333	6,983	45	59	60	**50**	Mod	Marginal	37	18	**49**
1944	Macadam Rd S	S 136th St	S 137th St	Collector	34	308	58	1,222	47	56	60	**50**	Mod	Marginal	38	15	**49**
1315	Macadam Rd S	S 137th St	S 138th St	Collector	34	783	148	3,106	48	58	60	**51**	Mod	Fair	38	15	**51**
1945	Macadam Rd S	S 138th St	S 144th St	Collector	34	1,997	377	7,921	49	64	60	**54**	Mod	Fair	37	14	**53**
1098	Macadam Rd S	S 144th St	S 149th Ln	Collector	34	1,662	314	6,593	61	69	30	**64**	Weak	Good	32	7	**63**

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2064	Macadam Rd S	S 149th Ln	S 150th St	Collector	34	195	37	774	62	61	60	**62**	Mod	Good	29	9	**61**
1943	Macadam Rd S	S 150th St	S 152nd St	Collector	34	867	164	3,439	44	65	60	**51**	Mod	Fair	34	21	**51**
1313	Macadam Rd S	S 152nd St	Southcenter Blvd	Collector	34	1,451	274	5,756	54	73	60	**60**	Mod	Good	27	19	**59**
1318	Martin L King Jr Way S	CITY LIMIT	S 104th Pl	Principal Arterial	56	114	35	745	75	72	60	**74**	Mod	V Good	14	10	**74**
1812	Martin L King Jr Way S	Boeing Access Rd	I-5 Ramp	Principal Arterial	56	163	51	1,065	60	54	60	**58**	Mod	Fair	28	12	**57**
1319	Martin L King Jr Way S	I-5 Ramp	I-5 Ramp	Principal Arterial	56	1,943	604	12,694	47	77	30	**57**	Weak	Fair	38	15	**56**
1813	Martin L King Jr Way S	I-5 Ramp	I-5 Ramp	Principal Arterial	56	586	182	3,829	52	87	30	**64**	Weak	Good	35	13	**64**
1148	Martin L King Jr Way S	I-5 Ramp	CITY LIMIT	Principal Arterial	56	1,935	602	12,642	53	87	30	**65**	Weak	Good	32	15	**64**
1593	Midland Dr	WEST END	Andover Park W	Local	22	900	110	2,310	39	50	60	**43**	Mod	Marginal	44	18	**42**
1614	Military Rd S	S 158th St	EAST END	Local	25	187	26	545	68	46	60	**61**	Mod	Good	17	4	**60**
1355	Minkler Blvd	Southcenter Pkwy	Bauch Dr	Collector	35	1,314	256	5,366	58	62	60	**60**	Mod	Fair	30	9	**59**
2019	Minkler Blvd	Bauch Dr	Andover Park W	Collector	35	672	131	2,744	65	66	60	**65**	Mod	Good	24	11	**65**
1365	Minkler Blvd	Andover Park W	Andover Park E	Collector	33	903	166	3,477	67	59	60	**64**	Mod	Good	21	12	**64**
1357	Minkler Blvd	Andover Park E	Industry Dr	Local	22	585	72	1,502	30	45	60	**35**	Mod	Poor	51	19	**34**
1372	Minkler Blvd	Industry Dr	EAST END	Local	23	598	76	1,605	51	52	60	**52**	Mod	Fair	31	17	**51**
1378	Nelsen Pl	S 156th St	Longacres Way	Local	24	571	76	1,599	60	37	60	**52**	Mod	Fair	34	6	**52**
1707	Norfolk St	East Marginal Way S	CITY LIMIT	Local	25	737	102	2,150	56	71	60	**61**	Mod	Good	33	11	**60**
1834	Olympic Ave S	Riverside Dr	Todd Blvd	Local	25	865	120	2,523	75	72	60	**74**	Mod	V Good	16	9	**74**
1633	Olympic Ave S	Todd Blvd	S Glacier St	Local	22	853	104	2,189	70	70	60	**70**	Mod	V Good	17	13	**69**
1371	Orillia Rd S	S 188th St	S 200th St	Principal Arterial	56	3,525	1,097	23,030	36	79	30	**50**	Weak	Fair	46	16	**49**
1645	Orillia Rd S	S 200th St	S 204th St	Principal Arterial	56	1,602	498	10,466	52	80	60	**61**	Mod	Good	31	13	**61**
1823	Pamela Dr	57th Ave S	NE END	Local	19	405	43	898	89	69	60	**82**	Mod	V Good	8	4	**82**
1664	Pamela Dr	Pamela Dr	Pamela Dr	Local	19	178	19	395	90	70	60	**83**	Mod	V Good	4	6	**83**
1213	Riverside Dr	Olympic Ave S	Cascade Ave S	Local	19	480	51	1,064	73	87	30	**78**	Weak	V Good	19	7	**78**
1420	Ryan St	Beacon Ave S	51st Ave S	Minor Arterial	45	349	87	1,832	46	57	60	**50**	Mod	Marginal	34	20	**49**
1827	Ryan Way	Martin L King Jr Way S	47th Ave S	Minor Arterial	45	978	245	5,135	40	60	60	**47**	Mod	Marginal	41	19	**46**
1377	Ryan Way	47th Ave S	S 107th St	Minor Arterial	45	227	57	1,192	43	64	60	**50**	Mod	Marginal	36	21	**49**
1826	Ryan Way	S 107th St	Beacon Ave S	Minor Arterial	45	1,126	282	5,912	36	67	60	**46**	Mod	Marginal	40	21	**46**
1622	Slade Way	S 160th St	53rd Pl S	Local	26	837	121	2,539	62	58	60	**61**	Mod	Good	23	15	**60**
1621	Slade Way	53rd Pl S	54th Ave S	Local	25	314	44	916	48	40	60	**46**	Mod	Marginal	35	17	**45**
1818	Southcenter Blvd	International Blvd	38th Ln S	Minor Arterial	45	838	210	4,400	66	61	60	**64**	Mod	Good	27	7	**64**
1342	Southcenter Blvd	38th Ln S	40th Ave S	Minor Arterial	42	432	101	2,117	53	63	60	**56**	Mod	Fair	30	6	**56**
1413	Southcenter Blvd	40th Ave S	40th Ave S	Minor Arterial	42	145	34	711	62	60	60	**61**	Mod	Good	31	8	**60**
1168	Southcenter Blvd	40th Ave S	42nd Ave S	Minor Arterial	44	566	138	2,905	56	60	60	**57**	Mod	Fair	37	7	**57**
1340	Southcenter Blvd	42nd Ave S	51st Ave S	Minor Arterial	44	2,694	659	13,829	74	73	60	**74**	Mod	V Good	21	6	**73**
2025	Southcenter Blvd	51st Ave S	52nd Ave S	Minor Arterial	45	371	93	1,948	80	78	60	**80**	Mod	V Good	14	6	**79**
1337	Southcenter Blvd	52nd Ave S	53rd Ave S	Minor Arterial	45	301	75	1,580	75	74	60	**75**	Mod	V Good	18	6	**75**
2043	Southcenter Blvd	53rd Ave S	I-5 Ramp	Minor Arterial	45	171	43	898	59	54	60	**57**	Mod	Fair	30	12	**56**
2042	Southcenter Blvd	I-5 Ramp	I-5 Fwy	Minor Arterial	45	69	17	362	89	82	60	**87**	Mod	Excellent	8	2	**86**
2041	Southcenter Blvd	I-5 Fwy	I-5 Fwy	Minor Arterial	56	38	12	248	83	100	60	**89**	Mod	Excellent	11	6	**88**
2039	Southcenter Blvd	I-5 Fwy	I-5 Fwy	Minor Arterial	41	99	23	474	69	81	60	**73**	Mod	V Good	21	10	**73**
2037	Southcenter Blvd	I-5 Fwy	I-5 Ramp	Minor Arterial	41	68	15	325	64	84	30	**71**	Weak	V Good	26	9	**70**
2035	Southcenter Blvd	I-5 Ramp	I-5 Fwy	Minor Arterial	41	76	17	364	98	89	60	**95**	Mod	Excellent	0	2	**95**
2031	Southcenter Blvd	I-5 Ramp	I-405 Ramp	Minor Arterial	40	362	80	1,689	52	76	30	**60**	Weak	Fair	37	11	**59**
1348	Southcenter Blvd	I-405 Ramp	I-405 Ramp	Principal Arterial	45	452	113	2,373	57	76	30	**63**	Weak	Good	33	10	**63**
1347	Southcenter Blvd	I-405 Ramp	DS@398E I-405 Ramp	Principal Arterial	45	398	100	2,090	84	72	60	**80**	Mod	V Good	12	4	**80**

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1821	Southcenter Blvd	DS@398E I-405 Ramp	61st Ave S	Principal Arterial	44	779	190	3,999	87	79	60	**84**	Mod	V Good	9	5	**84**
1416	Southcenter Blvd	61st Ave S	62nd Ave S	Principal Arterial	44	469	115	2,408	86	68	60	**80**	Mod	V Good	9	4	**80**
1820	Southcenter Blvd	62nd Ave S	65th Ave S	Principal Arterial	44	1,142	279	5,862	82	78	60	**81**	Mod	V Good	14	4	**80**
1629	Southcenter Blvd	65th Ave S	66th Ave S	Principal Arterial	44	587	143	3,013	79	60	60	**73**	Mod	V Good	16	5	**72**
1686	Southcenter Blvd	66th Ave S	I-405 Ramp	Local	25	649	90	1,893	79	63	60	**74**	Mod	V Good	15	6	**73**
1415	Southcenter Blvd	I-405 Ramp	I-405 Ramp	Local	26	60	9	182	81	82	60	**82**	Mod	V Good	15	4	**81**
1554	Southcenter Blvd	I-405 Ramp	Interurban Ave S	Local	27	77	12	243	91	85	60	**89**	Mod	Excellent	0	9	**89**
1507	Southcenter Blvd	Interurban Ave S	Interurban Ave S	Local	25	261	36	761	69	53	60	**64**	Mod	Good	24	7	**63**
1769	Southcenter Pkwy	Southcenter Mall	I-5 Ramp	Minor Arterial	45	622	156	3,266	77	78	30	**77**	Weak	V Good	19	4	**77**
1767	Southcenter Pkwy	I-5 Ramp	I-5 Ramp	Minor Arterial	45	162	41	851	76	59	60	**70**	Mod	V Good	20	4	**70**
1770	Southcenter Pkwy	I-5 Ramp	Klickitat Dr	Minor Arterial	45	383	96	2,011	98	89	60	**95**	Mod	Excellent	1	1	**95**
1768	Southcenter Pkwy	Klickitat Dr	I-5 Ramp	Minor Arterial	45	361	90	1,895	72	80	30	**74**	Weak	V Good	25	4	**74**
1776	Southcenter Pkwy	I-5 Ramp	Strander Blvd	Minor Arterial	45	218	55	1,145	62	66	60	**64**	Mod	Good	29	9	**63**
1775	Southcenter Pkwy	Strander Blvd	S 168th St	Minor Arterial	45	1,313	328	6,893	60	62	60	**61**	Mod	Good	27	13	**60**
1774	Southcenter Pkwy	S 168th St	Wig Blvd	Minor Arterial	45	666	167	3,497	62	73	60	**66**	Mod	Good	22	16	**65**
1691	Southcenter Pkwy	Wig Blvd	Minkler Blvd	Minor Arterial	45	599	150	3,145	59	64	60	**61**	Mod	Good	29	13	**60**
2063	Southcenter Pkwy	Minkler Blvd	S 180th St	Minor Arterial	45	2,716	679	14,259	77	73	60	**76**	Mod	V Good	19	4	**76**
1467	Southcenter Pkwy	S 180th St	A Line	Minor Arterial	45	900	225	4,725	83	78	60	**81**	Mod	V Good	14	3	**81**
1472	Southcenter Pkwy	A Line	Segale Park C Dr	Minor Arterial	45	613	153	3,218	83	93	60	**86**	Mod	Excellent	12	5	**86**
1693	Southcenter Pkwy	Segale Park C Dr	B Line	Minor Arterial	45	977	244	5,129	86	89	60	**87**	Mod	Excellent	12	2	**87**
1695	Southcenter Pkwy	B Line	C Line	Minor Arterial	45	650	163	3,413	87	91	60	**88**	Mod	Excellent	11	2	**88**
1764	Southcenter Pkwy	C Line	S 19000 Block	Minor Arterial	45	770	193	4,043	89	91	60	**89**	Mod	Excellent	9	3	**89**
1773	Southcenter Pkwy	S 19000 Block	S 19400 Block	Minor Arterial	45	1,030	258	5,408	86	90	60	**88**	Mod	Excellent	12	2	**87**
1778	Southcenter Pkwy	S 19400 Block	UnNamed-01543	Minor Arterial	45	1,150	288	6,038	87	88	60	**87**	Mod	Excellent	11	2	**87**
1343	Southcenter Pkwy	UnNamed-01543	UnNamed-01545	Minor Arterial	45	540	135	2,835	96	91	60	**94**	Mod	Excellent	3	1	**93**
1352	Southcenter Pkwy	UnNamed-01545	S 200th St	Minor Arterial	45	752	188	3,948	78	73	30	**76**	Weak	V Good	19	3	**76**
1705	Starfire Way	DS@1178E Starfire Way	Fort Dent Way	Local	27	1,353	203	4,262	91	73	60	**85**	Mod	V Good	5	4	**85**
1303	Strander Blvd	Southcenter Pkwy	61st Pl S	Minor Arterial	47	1,350	353	7,403	55	58	60	**56**	Mod	Fair	37	8	**56**
1307	Strander Blvd	61st Pl S	Andover Park W	Minor Arterial	47	662	173	3,630	53	62	30	**56**	Weak	Fair	43	4	**55**
1305	Strander Blvd	Andover Park W	Andover Park E	Minor Arterial	48	1,077	287	6,031	60	61	60	**60**	Mod	Good	30	11	**59**
1306	Strander Blvd	Andover Park E	Christensen Rd	Minor Arterial	48	771	206	4,318	59	60	60	**60**	Mod	Fair	31	10	**59**
1304	Strander Blvd	Christensen Rd	West Valley Hwy	Minor Arterial	48	847	226	4,743	71	49	60	**64**	Mod	Good	17	12	**63**
1302	Strander Blvd	West Valley Hwy	EAST END	Local	26	239	35	725	34	28	60	**32**	Mod	Poor	52	14	**31**
1290	Todd Blvd	Olympic Ave S	Cascade Ave S	Local	32	642	114	2,397	61	64	60	**62**	Mod	Good	32	8	**61**
1291	Todd Blvd	Cascade Ave S	West Valley Hwy S	Local	25	353	49	1,030	63	67	60	**64**	Mod	Good	27	10	**64**
1384	Treck Dr	WEST END	Andover Park E	Local	25	543	75	1,584	56	61	60	**58**	Mod	Fair	30	14	**57**
1845	Treck Dr	Treck Dr	Treck Dr	Local	27	204	31	643	75	54	60	**68**	Mod	Good	15	10	**67**
1129	Triland Dr	WEST END	Andover Park W	Local	27	1,174	176	3,698	48	45	60	**47**	Mod	Marginal	28	12	**46**
1104	Tukwila International Blvd	SR 99 Ramp	Tukwila Intl Blvd	Principal Arterial	56	2,111	657	13,792	77	86	30	**80**	Weak	V Good	20	3	**79**
2002	Tukwila International Blvd	Tukwila Intl Blvd	S 132nd St	Principal Arterial	56	302	94	1,973	88	90	60	**89**	Mod	Excellent	10	2	**89**
2124	Tukwila Intl Blvd	DS@91S East Marginal Way S	DS@509S East Marginal Way S	Principal Arterial	56	418	130	2,731	55	69	30	**60**	Weak	Fair	36	8	**59**
1082	Tukwila Intl Blvd	DS@172S Boeing Access Rd	DS@608S Boeing Access Rd	Local	25	436	61	1,272	49	77	30	**58**	Weak	Fair	40	11	**57**
1083	Tukwila Intl Blvd	DS@509S East Marginal Way S	Tukwila Intl Blvd	Principal Arterial	56	146	45	954	63	80	30	**69**	Weak	Good	30	6	**68**
1084	Tukwila Intl Blvd	DS@193S East Marginal Way S	Tukwila Intl Blvd	Local	32	209	37	780	56	58	60	**57**	Mod	Fair	31	12	**56**
1075	Tukwila Intl Blvd	DS@608S East Marginal Way S	S 112th St	Principal Arterial	44	1,027	251	5,272	44	75	60	**54**	Mod	Fair	36	20	**54**
1081	Tukwila Intl Blvd	Tukwila Intl Blvd	East Marginal Way S	Principal Arterial	56	144	45	941	79	60	60	**73**	Mod	V Good	17	4	**72**

City of Tukwila, WA

Street Inventory and Condition Summary - Sorted by Street Name

GISID	On Street	From Street	To Street	FunCL	Pavement Width (ft)	Pavement Length (ft)	Add Area (yd2)	Pavement Area (yd2)	Condition Summary: Surface Distress Index (SDI)	Roughness Index (RI)	Structural Index (SI)	Pavement Cndtn Index (PCI)	Strength Rating	Condition Rating	Load Assoc Distress Deducts (LADD)	Non-Load Distress Deducts (NLAD)	Current Segment PCI (CPCI)
1074	Tukwila Intl Blvd	East Marginal Way S	DS@193S East Marginal Way S	Local	22	193	24	495	73	53	60	**66**	Mod	Good	20	7	**66**
1073	Tukwila Intl Blvd	S 112th St	SR 99 Ramp	Principal Arterial	56	1,193	371	7,794	45	70	60	**54**	Mod	Fair	38	16	**53**
1079	Tukwila Intl Blvd	SR 99 Ramp	SR 599 Ramp	Principal Arterial	56	107	33	699	64	61	60	**63**	Mod	Good	25	12	**62**
1078	Tukwila Intl Blvd	SR 599 Ramp	SR 99 Ramp	Principal Arterial	56	196	61	1,281	52	76	60	**60**	Mod	Good	34	13	**60**
1077	Tukwila Intl Blvd	SR 99 Ramp	SR 99	Principal Arterial	56	230	72	1,503	45	63	60	**51**	Mod	Fair	41	14	**50**
1076	Tukwila Intl Blvd	SR 99	SR 599	Principal Arterial	56	192	60	1,254	63	85	30	**71**	Weak	V Good	27	10	**70**
1715	Tukwila Intl Blvd	SR 599	S 116th Way	Principal Arterial	56	121	38	791	53	41	60	**49**	Mod	Marginal	32	15	**49**
1080	Tukwila Intl Blvd	S 116th Way	SR 99	Principal Arterial	56	634	197	4,142	59	70	30	**63**	Weak	Good	33	8	**62**
1429	Tukwila Intl Blvd	SR 99	SR 99 Ramp	Principal Arterial	56	1,468	457	9,591	58	94	30	**70**	Weak	V Good	29	13	**69**
2003	Tukwila Intl Blvd	S 130th St	35th Ave S	Principal Arterial	56	346	108	2,261	71	71	60	**71**	Mod	V Good	23	6	**71**
2010	Tukwila Intl Blvd	S 132nd St	37th Ave S	Principal Arterial	56	604	188	3,946	83	78	60	**81**	Mod	V Good	14	3	**81**
2009	Tukwila Intl Blvd	37th Ave S	S 139th St	Principal Arterial	56	2,015	627	13,165	82	86	60	**83**	Mod	V Good	15	3	**83**
1438	Tukwila Intl Blvd	S 139th St	S 140th St	Principal Arterial	56	340	106	2,221	62	81	30	**69**	Weak	Good	28	10	**68**
1887	Tukwila Intl Blvd	S 140th St	S 141st St	Principal Arterial	56	238	74	1,555	57	78	30	**64**	Weak	Good	32	11	**63**
1105	Tukwila Intl Blvd	S 141st St	S 141st St	Principal Arterial	56	127	40	830	64	79	60	**69**	Mod	Good	25	11	**69**
1672	Tukwila Intl Blvd	S 141st St	S 142nd St	Principal Arterial	56	344	107	2,247	68	87	30	**74**	Weak	V Good	25	7	**74**
1886	Tukwila Intl Blvd	S 142nd St	S 144th St	Principal Arterial	56	679	211	4,436	65	73	30	**68**	Weak	Good	30	4	**67**
1885	Tukwila Intl Blvd	S 144th St	S 146th St	Principal Arterial	56	699	217	4,567	48	75	30	**57**	Weak	Fair	47	5	**56**
1884	Tukwila Intl Blvd	S 146th St	S 148th St	Principal Arterial	56	699	217	4,567	61	72	60	**65**	Mod	Good	30	9	**64**
1439	Tukwila Intl Blvd	S 148th St	S 150th St	Principal Arterial	56	700	218	4,573	55	79	30	**63**	Weak	Good	33	12	**62**
1437	Tukwila Intl Blvd	S 150th St	S 152nd St	Principal Arterial	56	704	219	4,599	35	68	30	**46**	Weak	Marginal	55	10	**45**
1054	Tukwila Pkwy	Southcenter Mall	61st Ave S	Minor Arterial	70	1,193	464	9,743	85	83	60	**85**	Mod	V Good	12	3	**84**
1055	Tukwila Pkwy	61st Ave S	I-405 Ramp	Minor Arterial	65	506	183	3,837	78	74	60	**77**	Mod	V Good	17	5	**76**
1056	Tukwila Pkwy	I-405 Ramp	Andover Park W	Minor Arterial	66	574	210	4,420	83	76	60	**81**	Mod	V Good	13	3	**81**
1053	Tukwila Pkwy	Andover Park W	Andover Park E	Minor Arterial	68	1,088	411	8,631	86	72	60	**81**	Mod	V Good	11	3	**81**
2133	Tukwila Pkwy	Andover Park E	I-405 Ramp	Minor Arterial	67	458	170	3,580	87	68	60	**80**	Mod	V Good	8	5	**80**
1746	Upland Dr	WEST END	Andover Park W	Local	20	919	102	2,144	77	61	60	**72**	Mod	V Good	18	5	**71**
1394	Wallace St	NW END	CITY LIMIT	Local	26	328	47	995	65	37	60	**55**	Mod	Fair	21	15	**55**
1518	West Marginal Pl S	CITY LIMIT	S 102nd St	Local	21	2,203	257	5,397	26	65	60	**39**	Mod	Poor	55	16	**38**
1292	West Valley Hwy	Interurban Ave S	I-405 Ramp	Principal Arterial	55	556	170	3,568	71	81	30	**74**	Weak	V Good	22	7	**74**
1295	West Valley Hwy	I-405 Ramp	Longacres Way	Principal Arterial	56	594	185	3,881	86	76	60	**83**	Mod	V Good	10	4	**83**
1550	West Valley Hwy	Longacres Way	Strander Blvd	Principal Arterial	56	1,529	476	9,989	79	79	30	**79**	Weak	V Good	19	3	**78**
1293	West Valley Hwy	Strander Blvd	S 180th St	Principal Arterial	58	5,933	1,912	40,147	67	85	30	**73**	Weak	V Good	30	3	**72**
1294	West Valley Hwy	S 180th St	Todd Blvd	Principal Arterial	60	2,082	694	14,574	67	80	30	**71**	Weak	V Good	30	3	**70**
1498	West Valley Hwy S	Todd Blvd	CITY LIMIT	Principal Arterial	59	975	320	6,711	62	73	30	**66**	Weak	Good	30	8	**65**
1665	Wig Blvd	Southcenter Pkwy	Bauch Dr	Local	22	1,325	162	3,401	74	55	60	**68**	Mod	Good	21	5	**67**

Appendix B
$1.05M/Year Rehabilitation Plans by Segment

City of Tukwila, WA

Street Inventory and Five Year Rehabilitation Plan By Segment

$1050k/Year Rehabilitation Plan

Current PCI Date: 7/16/2020

Analysis Start Date: 1/1/2021

GISID	On Street	From Street	To Street	Year of First Rehab	Segment Rehab Results	Rehab Activity Code	Rehab Activity	Avg Unit Rate ($/yd2)	Segment Pavement Cost ($)	Segment Total Cost ($)	Whole Project Cost ($)	5 Year Post Rehab PCI
1001	Costco Dr	Andover Park E	DS@280E Andover Park E	1	Selected Yr 1	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	25,794	25,794	148,521	90
1593	Midland Dr	WEST END	Andover Park W	1	Selected Yr 1	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	91,245	91,245	237,316	90
1357	Minkler Blvd	Andover Park E	Industry Dr	1	Selected Yr 1	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	59,329	59,329	148,521	90
1372	Minkler Blvd	Industry Dr	EAST END	1	Selected Yr 1	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	63,398	63,398	148,521	90
1601	140th St	34th Ave S	37th Ave S	1	Selected Yr 1	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	45,899	45,899	202,201	90
1604	140th St	37th Ave S	38th Ave S	1	Selected Yr 1	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	38,197	38,197	202,201	90
1484	140th St	38th Ave S	Tukwila Intl Blvd	1	Selected Yr 1	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	41,791	41,791	202,201	90
1589	141st St	37th Ave S	Tukwila Intl Blvd	1	Selected Yr 1	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	76,314	76,314	202,201	90
1677	144th St	Military Rd S	34th Ave S	1	Selected Yr 1	30	Edge Mill + Thin Overlay (1.5 - 2.0)	23.25	25,970	25,970	133,734	87
2016	144th St	34th Ave S	34th Ln S	1	Selected Yr 1	30	Edge Mill + Thin Overlay (1.5 - 2.0)	23.25	23,529	23,529	133,734	87
2015	144th St	34th Ln S	37th Ave S	1	Selected Yr 1	30	Edge Mill + Thin Overlay (1.5 - 2.0)	23.25	40,292	40,292	133,734	87
1187	144th St	37th Ave S	Tukwila Intl Blvd	1	Selected Yr 1	30	Edge Mill + Thin Overlay (1.5 - 2.0)	23.25	43,943	43,943	133,734	87
1775	Southcenter Pkwy	Strander Blvd	S 168th St	1	Selected Yr 1	30	Edge Mill + Thin Overlay (1.5 - 2.0)	24.00	165,432	165,432	324,840	87
1774	Southcenter Pkwy	S 168th St	Wig Blvd	1	Selected Yr 1	30	Edge Mill + Thin Overlay (1.5 - 2.0)	24.00	83,928	83,928	324,840	87
1691	Southcenter Pkwy	Wig Blvd	Minkler Blvd	1	Selected Yr 1	30	Edge Mill + Thin Overlay (1.5 - 2.0)	24.00	75,480	75,480	324,840	87
1129	Triland Dr	WEST END	Andover Park W	1	Selected Yr 1	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	146,071	146,071	237,316	90
1454	200th St	Southcenter Pkwy	CITY LIMIT	2	Selected Yr 2	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	427,746	427,746	427,746	90
1420	Ryan St	Beacon Ave S	51st Ave S	2	Selected Yr 2	50	FWM + Thick Overlay (> 2.0 - 3.0)	43.50	79,692	79,692	336,864	91
1827	Ryan Way	Martin L King Jr Way S	47th Ave S	2	Selected Yr 2	50	FWM + Thick Overlay (> 2.0 - 3.0)	43.50	223,373	223,373	275,225	91
1377	Ryan Way	47th Ave S	S 107th St	2	Selected Yr 2	50	FWM + Thick Overlay (> 2.0 - 3.0)	43.50	51,852	51,852	275,225	91
1826	Ryan Way	S 107th St	Beacon Ave S	2	Selected Yr 2	50	FWM + Thick Overlay (> 2.0 - 3.0)	43.50	257,172	257,172	336,864	91
1978	Boeing Access Rd	Airport Way S	Airport Way S	3	Selected Yr 3	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	88,043	88,043	370,189	92
1754	Boeing Access Rd	I-5 Ramp	Airport Way S	3	Selected Yr 3	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	39,221	39,221	370,189	92
1750	Boeing Access Rd	I-5 Ramp	I-5 Ramp	3	Selected Yr 3	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	86,632	86,632	370,189	92
1755	Boeing Access Rd	I-5 Ramp	Martin L King Jr Ramp	3	Selected Yr 3	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	88,088	88,088	370,189	92
1975	Boeing Access Rd	Martin L King Jr Ramp	Martin L King Jr Way S	3	Selected Yr 3	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	68,205	68,205	370,189	92
1871	Interurban Ave S	56th Ave S	S 140th St	3	Selected Yr 3	53	FWM + Thick Overlay (> 2.0 - 3.0) + Strctrl Ptch	48.00	659,760	659,760	659,760	92
1353	143rd Pl	Interurban Ave S	EAST END	3	Selected Yr 3	23	MicroSurface / Chip Seal + Strctrl Ptch	7.75	19,724	19,724	19,724	86
1790	44th Ave S	S 140th St	S 142nd St	4	Selected Yr 4	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	56,920	56,920	122,056	94
1969	61st Ave S	Southcenter Blvd	Tukwila Pkwy	4	Selected Yr 4	53	FWM + Thick Overlay (> 2.0 - 3.0) + Strctrl Ptch	45.50	124,625	124,625	198,290	94
1955	66th Ave S	Southcenter Blvd	I-405 Ramp	4	Selected Yr 4	53	FWM + Thick Overlay (> 2.0 - 3.0) + Strctrl Ptch	45.50	45,728	45,728	198,290	94
1880	Interurban Ave S	S 140th St	58th Ave S	4	Selected Yr 4	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	242,015	242,015	424,834	94
1167	Interurban Ave S	58th Ave S	S 143rd St	4	Selected Yr 4	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	182,819	182,819	424,834	94
1392	Interurban Ave S	I-405 Ramp	DS@490E I-405 Ramp	4	Selected Yr 4	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	145,646	145,646	291,429	94
1867	Interurban Ave S	DS@490E I-405 Ramp	Fun Center Way	4	Selected Yr 4	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	37,174	37,174	291,429	94
1562	Interurban Ave S	Fun Center Way	SW Grady Way	4	Selected Yr 4	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	67,431	67,431	291,429	94
1872	Interurban Ave S	SW Grady Way	West Valley Hwy	4	Selected Yr 4	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	41,178	41,178	291,429	94
1587	141st St	Tukwila Intl Blvd	42nd Ave S	4	Selected Yr 4	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	65,136	65,136	122,056	94
1346	Grady Way	Interurban Ave S	Fun Center Way	4	Selected Yr 4	53	FWM + Thick Overlay (> 2.0 - 3.0) + Strctrl Ptch	45.50	27,937	27,937	198,290	94

IMS Easy Street Analysis

GISID	On Street	From Street	To Street	Year of First Rehab	Segment Rehab Results	Rehab Activity Code	Rehab Activity	Avg Unit Rate ($/yd2)	Segment Pavement Cost ($)	Segment Total Cost ($)	Whole Project Cost ($)	5 Year Post Rehab PCI
1882	East Marginal Way S	S 96th Pl	S Norfolk St	5	Selected Yr 5	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	406,861	406,861	406,861	96
1008	East Marginal Way S	Boeing Access Rd	Tukwila Intl Blvd	5	Selected Yr 5	50	FWM + Thick Overlay (> 2.0 - 3.0)	43.50	30,015	30,015	345,347	96
1010	East Marginal Way S	Tukwila Intl Blvd	S 112th St	5	Selected Yr 5	50	FWM + Thick Overlay (> 2.0 - 3.0)	43.50	206,756	206,756	345,347	96
1427	East Marginal Way S	S 112th St	S 115th St	5	Selected Yr 5	50	FWM + Thick Overlay (> 2.0 - 3.0)	43.50	108,576	108,576	345,347	96
1101	180th St	West Valley Hwy	S 180th St	5	Selected Yr 5	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	294,795	294,795	294,795	96

Appendix C

$1.05M/Year Rehabilitation Plans by Year

City of Tukwila, WA

Street Inventory and Five Year Rehabilitation Plan By Year

$1050k/Year Rehabilitation Plan

Current PCI Date: 7/16/2020

Analysis Start Date: 1/1/2021

IMS Easy Street Analysis

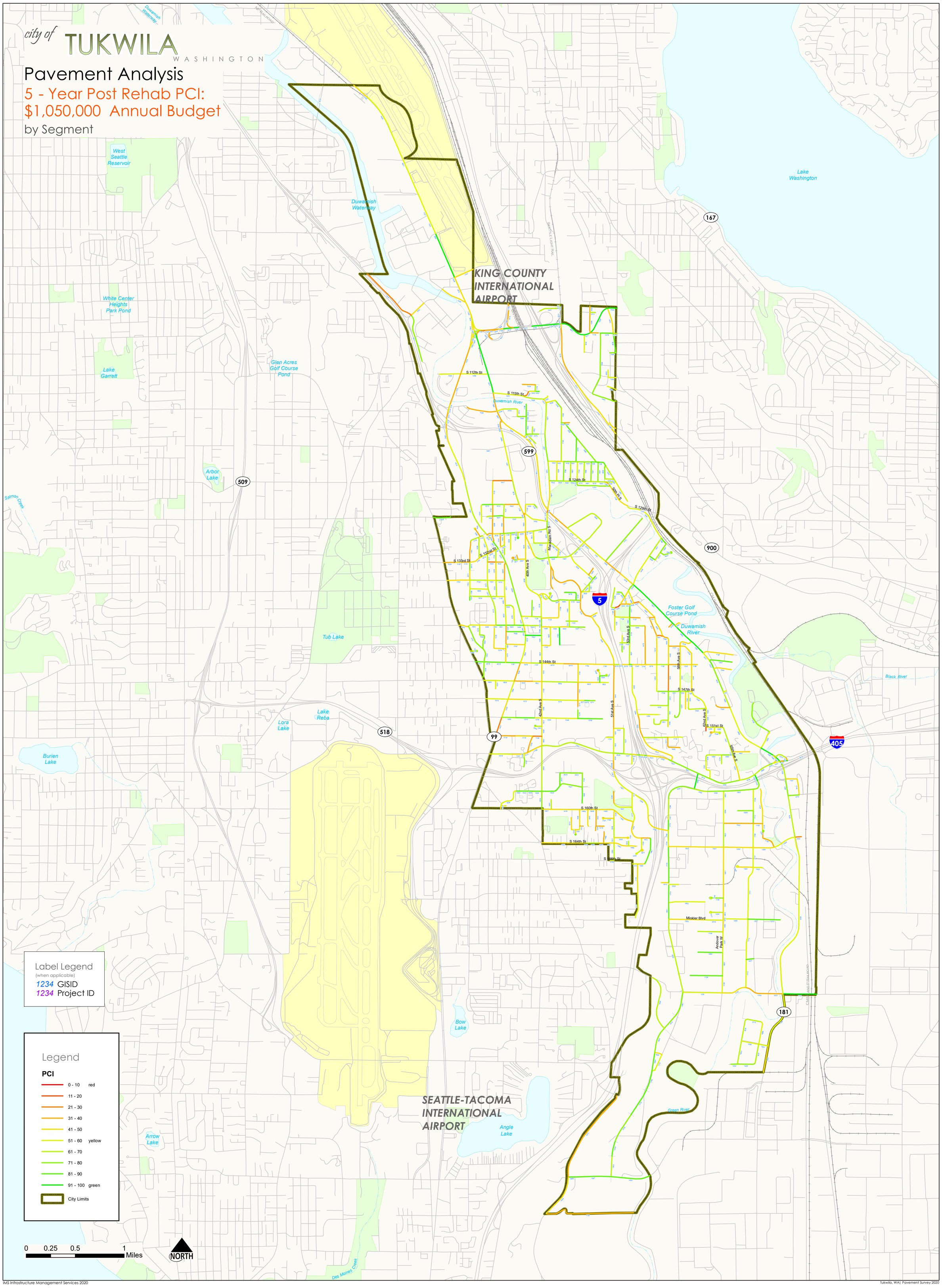
GISID	On Street	From Street	To Street	Year of First Rehab	Segment Rehab Results	Rehab Activity Code	Rehab Activity	Avg Unit Rate ($/yd2)	Segment Pavement Cost	Segment Total Cost ($)	Whole Project Cost ($)	5 Year Post Rehab PCI
1001	Costco Dr	Andover Park E	DS@280E Andover Park E	1	Selected Yr 1	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	25,794	25,794	148,521	90
1357	Minkler Blvd	Andover Park E	Industry Dr	1	Selected Yr 1	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	59,329	59,329	148,521	90
1372	Minkler Blvd	Industry Dr	EAST END	1	Selected Yr 1	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	63,398	63,398	148,521	90
1601	140th St	34th Ave S	37th Ave S	1	Selected Yr 1	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	45,899	45,899	202,201	90
1604	140th St	37th Ave S	38th Ave S	1	Selected Yr 1	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	38,197	38,197	202,201	90
1484	140th St	38th Ave S	Tukwila Intl Blvd	1	Selected Yr 1	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	41,791	41,791	202,201	90
1589	141st St	37th Ave S	Tukwila Intl Blvd	1	Selected Yr 1	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	76,314	76,314	202,201	90
1677	144th St	Military Rd S	34th Ave S	1	Selected Yr 1	30	Edge Mill + Thin Overlay (1.5 - 2.0)	23.25	25,970	25,970	133,734	87
2016	144th St	34th Ave S	34th Ln S	1	Selected Yr 1	30	Edge Mill + Thin Overlay (1.5 - 2.0)	23.25	23,529	23,529	133,734	87
2015	144th St	34th Ln S	37th Ave S	1	Selected Yr 1	30	Edge Mill + Thin Overlay (1.5 - 2.0)	23.25	40,292	40,292	133,734	87
1187	144th St	37th Ave S	Tukwila Intl Blvd	1	Selected Yr 1	30	Edge Mill + Thin Overlay (1.5 - 2.0)	23.25	43,943	43,943	133,734	87
1775	Southcenter Pkwy	Strander Blvd	S 168th St	1	Selected Yr 1	30	Edge Mill + Thin Overlay (1.5 - 2.0)	24.00	165,432	165,432	324,840	87
1774	Southcenter Pkwy	S 168th St	Wig Blvd	1	Selected Yr 1	30	Edge Mill + Thin Overlay (1.5 - 2.0)	24.00	83,928	83,928	324,840	87
1691	Southcenter Pkwy	Wig Blvd	Minkler Blvd	1	Selected Yr 1	30	Edge Mill + Thin Overlay (1.5 - 2.0)	24.00	75,480	75,480	324,840	87
1593	Midland Dr	WEST END	Andover Park W	1	Selected Yr 1	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	91,245	91,245	237,316	90
1129	Triland Dr	WEST END	Andover Park W	1	Selected Yr 1	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	146,071	146,071	237,316	90
1454	200th St	Southcenter Pkwy	CITY LIMIT	2	Selected Yr 2	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	427,746	427,746	427,746	90
1827	Ryan Way	Martin L King Jr Way S	47th Ave S	2	Selected Yr 2	50	FWM + Thick Overlay (> 2.0 - 3.0)	43.50	223,373	223,373	275,225	91
1377	Ryan Way	47th Ave S	S 107th St	2	Selected Yr 2	50	FWM + Thick Overlay (> 2.0 - 3.0)	43.50	51,852	51,852	275,225	91
1420	Ryan St	Beacon Ave S	51st Ave S	2	Selected Yr 2	50	FWM + Thick Overlay (> 2.0 - 3.0)	43.50	79,692	79,692	336,864	91
1826	Ryan Way	S 107th St	Beacon Ave S	2	Selected Yr 2	50	FWM + Thick Overlay (> 2.0 - 3.0)	43.50	257,172	257,172	336,864	91
1978	Boeing Access Rd	Airport Way S	Airport Way S	3	Selected Yr 3	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	88,043	88,043	370,189	92
1754	Boeing Access Rd	I-5 Ramp	Airport Way S	3	Selected Yr 3	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	39,221	39,221	370,189	92
1750	Boeing Access Rd	I-5 Ramp	I-5 Ramp	3	Selected Yr 3	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	86,632	86,632	370,189	92
1755	Boeing Access Rd	I-5 Ramp	Martin L King Jr Ramp	3	Selected Yr 3	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	88,088	88,088	370,189	92
1975	Boeing Access Rd	Martin L King Jr Ramp	Martin L King Jr Way S	3	Selected Yr 3	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	68,205	68,205	370,189	92
1871	Interurban Ave S	56th Ave S	S 140th St	3	Selected Yr 3	53	FWM + Thick Overlay (> 2.0 - 3.0) + Strctrl Ptch	48.00	659,760	659,760	659,760	92
1353	143rd Pl	Interurban Ave S	EAST END	3	Selected Yr 3	23	MicroSurface / Chip Seal + Strctrl Ptch	7.75	19,724	19,724	19,724	86
1969	61st Ave S	Southcenter Blvd	Tukwila Pkwy	4	Selected Yr 4	53	FWM + Thick Overlay (> 2.0 - 3.0) + Strctrl Ptch	45.50	124,625	124,625	198,290	94
1955	66th Ave S	Southcenter Blvd	I-405 Ramp	4	Selected Yr 4	53	FWM + Thick Overlay (> 2.0 - 3.0) + Strctrl Ptch	45.50	45,728	45,728	198,290	94
1346	Grady Way	Interurban Ave S	Fun Center Way	4	Selected Yr 4	53	FWM + Thick Overlay (> 2.0 - 3.0) + Strctrl Ptch	45.50	27,937	27,937	198,290	94
1880	Interurban Ave S	S 140th St	58th Ave S	4	Selected Yr 4	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	242,015	242,015	424,834	94
1167	Interurban Ave S	58th Ave S	S 143rd St	4	Selected Yr 4	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	182,819	182,819	424,834	94
1392	Interurban Ave S	I-405 Ramp	DS@490E I-405 Ramp	4	Selected Yr 4	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	145,646	145,646	291,429	94
1867	Interurban Ave S	DS@490E I-405 Ramp	Fun Center Way	4	Selected Yr 4	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	37,174	37,174	291,429	94
1562	Interurban Ave S	Fun Center Way	SW Grady Way	4	Selected Yr 4	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	67,431	67,431	291,429	94
1872	Interurban Ave S	SW Grady Way	West Valley Hwy	4	Selected Yr 4	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	41,178	41,178	291,429	94
1587	141st St	Tukwila Intl Blvd	42nd Ave S	4	Selected Yr 4	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	65,136	65,136	122,056	94
1790	44th Ave S	S 140th St	S 142nd St	4	Selected Yr 4	50	FWM + Thick Overlay (> 2.0 - 3.0)	39.50	56,920	56,920	122,056	94
1882	East Marginal Way S	S 96th Pl	S Norfolk St	5	Selected Yr 5	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	406,861	406,861	406,861	96
1008	East Marginal Way S	Boeing Access Rd	Tukwila Intl Blvd	5	Selected Yr 5	50	FWM + Thick Overlay (> 2.0 - 3.0)	43.50	30,015	30,015	345,347	96
1010	East Marginal Way S	Tukwila Intl Blvd	S 112th St	5	Selected Yr 5	50	FWM + Thick Overlay (> 2.0 - 3.0)	43.50	206,756	206,756	345,347	96
1427	East Marginal Way S	S 112th St	S 115th St	5	Selected Yr 5	50	FWM + Thick Overlay (> 2.0 - 3.0)	43.50	108,576	108,576	345,347	96
1101	180th St	West Valley Hwy	S 180th St	5	Selected Yr 5	50	FWM + Thick Overlay (> 2.0 - 3.0)	45.50	294,795	294,795	294,795	96

city of TUKWILA WASHINGTON

Pavement Analysis

5 - Year Post Rehab PCI:
$1,050,000 Annual Budget

by Segment



Label Legend
(when applicable)
1234 GISID
1234 Project ID

Legend

PCI

- 0 - 10 red
- 11 - 20
- 21 - 30
- 31 - 40
- 41 - 50
- 51 - 60 yellow
- 61 - 70
- 71 - 80
- 81 - 90
- 91 - 100 green
- City Limits

0 0.25 0.5 1 Miles

NORTH

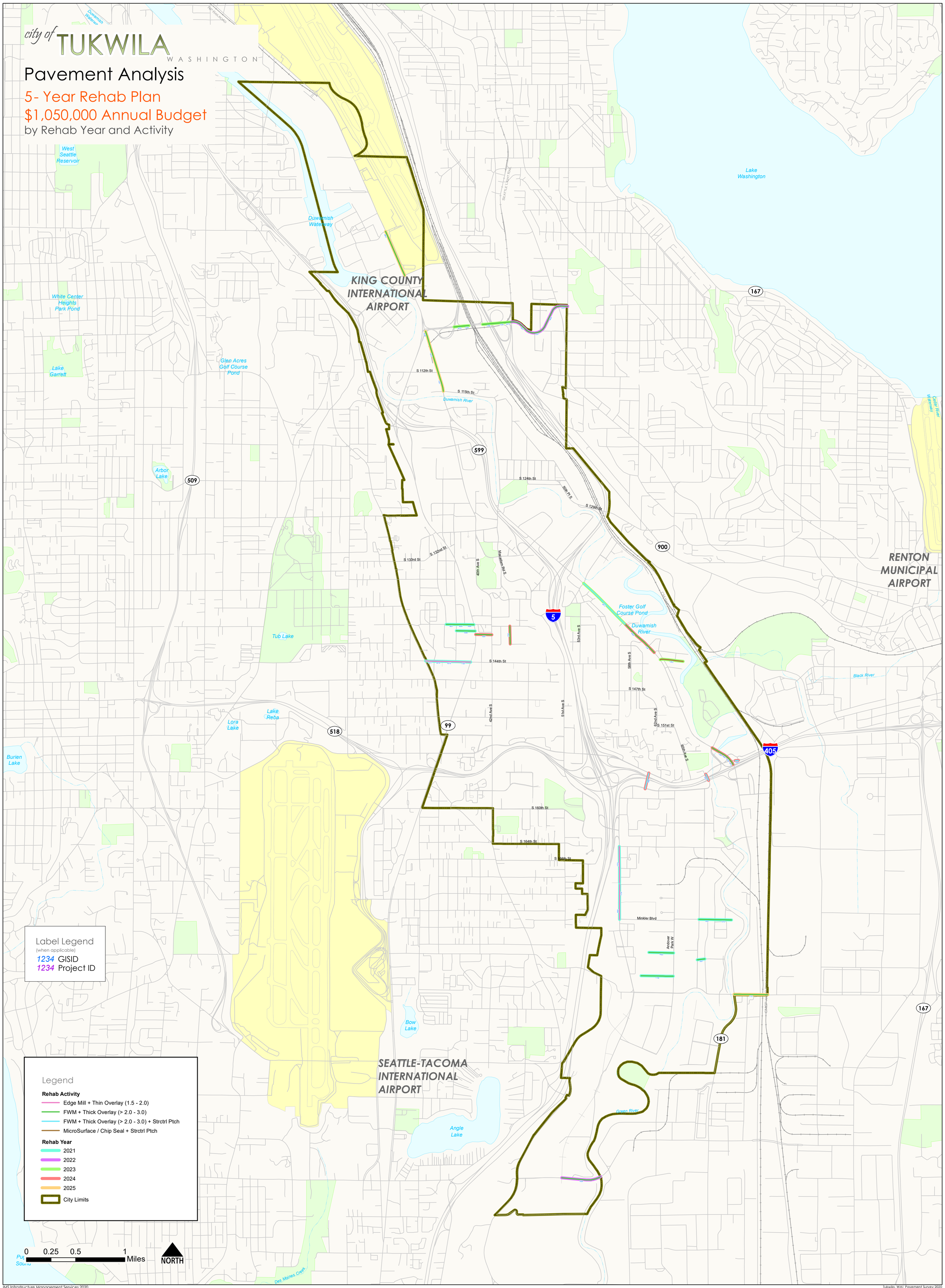
IMS Infrastructure Management Services 2020

Tukwila, WA| Pavement Survey 2020

city of TUKWILA WASHINGTON

Pavement Analysis

5- Year Rehab Plan
$1,050,000 Annual Budget
by Rehab Year and Activity



Label Legend
(when applicable)
1234 GISID
1234 Project ID

Legend

Rehab Activity
- Edge Mill + Thin Overlay (1.5 - 2.0)
- FWM + Thick Overlay (> 2.0 - 3.0)
- FWM + Thick Overlay (> 2.0 - 3.0) + Strctrl Ptch
- MicroSurface / Chip Seal + Strctrl Ptch

Rehab Year
- 2021
- 2022
- 2023
- 2024
- 2025
- City Limits

0 0.25 0.5 1 Miles

NORTH

IMS Infrastructure Management Services 2020

Tukwila, WA| Pavement Survey 2020

city of TUKWILA WASHINGTON

Pavement Analysis

Assembled Projects

by Project ID

KING COUNTY INTERNATIONAL AIRPORT

RENTON MUNICIPAL AIRPORT

SEATTLE-TACOMA INTERNATIONAL AIRPORT

Label Legend
(when applicable)
1234 GISID
1234 Project ID

Legend
City Limits

0 0.25 0.5 1 Miles

NORTH

IMS Infrastructure Management Services 2020

Tukwila, WA| Pavement Survey 2020

city of TUKWILA WASHINGTON

Pavement Analysis

Functional Classification

by Segment

KING COUNTY INTERNATIONAL AIRPORT

RENTON MUNICIPAL AIRPORT

SEATTLE-TACOMA INTERNATIONAL AIRPORT

Label Legend
(when applicable)
1234 GISID
1234 Project ID

Legend
- Collector
- Local
- Minor Arterial
- Principal Arterial
- City Limits

0 0.25 0.5 1 Miles

NORTH

IMS Infrastructure Management Services 2020

Tukwila, WA| Pavement Survey 2020

city of TUKWILA WASHINGTON

Pavement Analysis

Pavement Condition (Descriptive GFP)

by Segment

KING COUNTY INTERNATIONAL AIRPORT

SEATTLE-TACOMA INTERNATIONAL AIRPORT

Label Legend
(when applicable)
1234 GISID
1234 Project ID

Legend

Condition Rating (Descriptive GFP)

- 0 - 25 Very Poor
- 26 - 40 Poor
- 41 - 50 Marginal
- 51 - 60 Fair
- 61 - 70 Good
- 71 - 85 Very Good
- 86 - 100 Excellent
- City Limits

0 0.25 0.5 1 Miles

NORTH

IMS Infrastructure Management Services 2020

Tukwila, WA| Pavement Survey 2020

city of TUKWILA WASHINGTON

Pavement Analysis

Pavement Condition Index (PCI)

Current PCI by Segment

KING COUNTY INTERNATIONAL AIRPORT

SEATTLE-TACOMA INTERNATIONAL AIRPORT

Label Legend
(when applicable)
1234 GISID
1234 Project ID

Legend

PCI
- 0 - 10 red
- 11 - 20
- 21 - 30
- 31 - 40
- 41 - 50
- 51 - 60 yellow
- 61 - 70
- 71 - 80
- 81 - 90
- 91 - 100 green
- City Limits

0 0.25 0.5 1 Miles

NORTH

IMS Infrastructure Management Services 2020

Tukwila, WA| Pavement Survey 2020