

## Roads Right-of-Way Valuation Model

Developed in response to Ordinance 18835, Section 19, Proviso P1

January 31, 2019

State law (RCW 36.87.120) establishes a methodology to determine the value of county roads being vacated and sold to another party. This statute provides for deductions from the appraised value to reflect transfer of liability or risk, avoided costs, and future property tax revenue. Amendments proposed in 2016 would have assigned the responsibility for the calculation to the appropriate executive branch agency, but the final version of the legislation assigned the responsibility to the board of county commissioners. In King County, the County Council serves in this role and has assigned the review process to its Hearing Examiner. The Hearing Examiner and Council have asked the Office of Performance, Strategy and Budget for a proposed methodology to do these calculations. This report is the response to that request.

The attached table describes proposed methodologies for calculating the value of three types of vacations: 1) opened roads; 2) frequently traversed public areas; and 3) undeveloped and unopened rights-of-way. The third type is the most common and poses the most complications. Many properties of this type have been owned by the Road Services Division for decades and reflect haphazard creations of rights-of-way that will never be used by Roads. These properties are often difficult to value since they may be unbuildable, accessible only to neighboring property owners, and/or are of odd shapes. They typically have no value for Roads and are a source of potential liability if used for illegal purposes, such as dumping of hazardous materials. They often have only modest value for adjoining property owners because they benefit from open space that they know will not be developed. The proposed methodology takes these factors into consideration.

In all three categories of property, the proposed methodology reflects the reduction in risk to the County if the property is sold to another owner. The Office of Risk Management Services has developed a detailed formula for this calculation of risk reduction.

The proposed methodology includes the incremental property tax revenue that will result from the property entering private ownership. This calculation is restricted to property taxes for the General Fund and Roads Fund only. Revenue for these funds increases when property is added to the tax roll and both can be used to support the roads system. Other County-imposed property taxes, such as levy lid lifts and excess levies for debt service, typically generate a pre-determined amount of revenue and don't benefit from increased property value.

The proposed methodology reflects avoided maintenance costs for opened roads that are transferred to private ownership. Roads typically spends very little to maintain the other two categories of properties but does face significant costs if such properties are misused. This is reflected in an avoided cost calculation.

The calculations in the attachment are based on a 10-year time period and are discounted at the discount rate established annually by the Office of Economic and Financial Analysis (OEFA). To simplify

the calculations, projected changes in specific items and the effect of discounting are calculated and shown as multipliers. The underlying formulas are explained in notes. The 10-year time period was chosen to acknowledge that conditions could be quite different in subsequent years. For example, the financial situation of the Road Services Division continues to deteriorate over time due to revenue limitations in State law, so calculations of maintenance costs in the more distant future could be much different than today.

The proposed approach will require annual updates to specific values that are itemized at the bottom of the attachment. Once these are set, the same calculations will apply at any time within that year.

**Table 1: VALUATION OF ROADS RIGHTS-OF-WAY**

<b>Factor</b>	<b>Opened Roads</b>	<b>Frequently Traversed Public Areas</b>	<b>Undeveloped Unopened ROW</b>
Appraised Value	Varies by parcel.	Varies by parcel.	Varies by parcel. This typically will be low for these types of parcels since they are usually unbuildable and often accessible only by adjacent property owners.
<b>Subtract:</b> Transfer of Liability or Risk	Average of 5 years of claims, judgments, and settlements against the Road Services Division, divided by the total number of road miles in the system, multiplied by the mileage of the parcel, multiplied by 9.58 (see notes 1 and 2).	Average of 5 years of claims, judgments, and settlements against the Road Services Division multiplied by 0.958 (see note 3).	Zero. There are few claims, judgments, or settlements on these types of property. Thus, potential liabilities are identified in the "avoided costs" section below.
<b>Subtract:</b> Expected Property Taxes	Appraised value of parcel multiplied by the combined property tax rate for the General Fund and Roads Fund, multiplied by 8.62 (see notes 4 and 5).	Appraised value of parcel multiplied by the combined property tax rate for the General Fund and Roads Fund, multiplied by 8.62 (see notes 4 and 5).	Appraised value of parcel multiplied by the combined property tax rate for the General Fund and Roads Fund, multiplied by 8.62 (see notes 4 and 5).
<b>Subtract:</b> Management and Maintenance Costs	Roads annual operating budget, divided by the total number of road miles in the system, multiplied by the mileage of the parcel, multiplied by 9.58 (see notes 6 and 2).	Zero. Roads spends almost nothing maintaining or managing these types of parcels.	While Roads typically does not perform routine or scheduled maintenance on unopened ROW, the Division does receive constituent requests for services such as removal of downed or dangerous trees, cleanup of illegal dumping (including

<p><b>Subtract:</b> Management and Maintenance Costs (Continued)</p>			<p>dumping of hazardous materials, meth labs, etc.), and research and requests for assistance regarding ROW encroachments or unauthorized uses . Thus, there is a significant avoided cost if the property is transferred to other ownership. This will be estimated by one of the following means, depending on data availability: 1) actual costs incurred on the parcel in the last five years; 2) typical costs incurred on similar parcels in the last five years; or, 3) if data for #1 or #2 is not available, 2% of total Roads annual expenditures for the last five years for clean-up of illegal dumping, tree and vegetation removal, ROW encroachment research and resolution / enforcement, enforcement to prevent of unauthorized uses, and administrative costs associated with unopened county ROW.</p>
<p>DLS Processing Costs</p>	<p>Do not include. DLS processing costs vary by parcel. However, the cost should not make it more difficult to get rid of surplus property. In addition, DLS likely would not reduce staff if it stopped disposing of surplus property, so this should be treated as a fixed cost.</p>	<p>Do not include. DLS processing costs vary by parcel. However, the cost should not make it more difficult to get rid of surplus property. In addition, DLS likely would not reduce staff if it stopped disposing of surplus property, so this should be treated as a fixed cost.</p>	<p>Do not include. DLS processing costs vary by parcel. However, the cost should not make it more difficult to get rid of surplus property. In addition, DLS likely would not reduce staff if it stopped disposing of surplus property, so this should be treated as a fixed cost.</p>
<p><b>TOTAL</b></p>	<p><b>Sum of all items.</b></p>	<p><b>Sum of all items.</b></p>	<p><b>Sum of all items.</b></p>

**NOTES:**

- 1) This is based on the sum of all claims, settlements, judgments, etc., measured per mile of the roads system.
- 2) The 9.58 multiplier is based on ten years, with annual costs escalating at 3.5%, discounted by the OEFA discount rate of 4.5%. Ten years was chosen as a reasonable time period in which current conditions (e.g., the legal environment and tax structure) will likely persist.
- 3) There are substantially fewer claims for properties of this type, so this is calculated at 10% of the corresponding value for opened roads.
- 4) Includes General Fund and Roads Fund only since added property value increases these revenues. Excludes bonds, levy lid lifts, etc. because adding property value does not increase these revenues.
- 5) The 8.62 multiplier is based on 10 years, with annual revenue increasing by the 1% limit in State law, discounted by the OEFA discount rate of 4.5%.
- 6) The Roads operating budget is the best measure of management and maintenance costs. The capital budget is highly variable and likely to shrink.

**ANNUAL UPDATES:**

The factors identified in the table need to be updated annually. These include:

- 1) Claims, judgments, settlements, and reserved expenses per mile. The Office of Risk Management Services has developed a complete methodology for this calculation.
- 2) General Fund and Roads Fund property tax rates.
- 3) Total road mileage in the system.
- 4) Roads operating budget (use half of the biennial budget).
- 5) OEFA discount rate.

**VALUATION OF ROADS RIGHT-OF-WAY**

Based on PSB Response to Proviso

**V-2692**  
**Ordinance 2018-0406**

**Parcel 222507-9012**

Portion of NE 32nd Street, County Road No. 1334

Factor	Opened Roads	Frequently Traversed Public Areas	Undeveloped Unopened ROW
Appraised Value	\$ -	\$ -	\$ -
<b>Subtract: Transfer of Liability or Risk</b>	\$ 1,164	\$ 116	\$ 0
<b>Subtract: Expected Property Taxes</b>	\$ -	\$ -	\$ -
<b>Subtract: Management and Maintenance Costs</b>	\$ 88,387	\$ 0	\$ 2,000
DLS Processing Costs	0	0	0
<b>TOTAL</b>	<b>\$ (89,551)</b>	<b>\$ (116)</b>	<b>\$ (2,000)</b>

**ANNUAL UPDATES:**

The factors identified in the table need to be updated annually. These include:

- 1) Claims, judgments, settlements, and reserved expenses per mile. The Office of Risk Management Services has developed a complete methodology for this calculation.
- 2) General Fund and Roads Fund property tax rates.
- 3) Total road mileage in the system.
- 4) Roads operating budget (use half of the biennial budget).

Factor:	Provider:	Number	Update Frequency
Value of vacation area	DOA	-	See below *
"Mileage" of parcel	DOA	0.13	Parcel size in linear mileage
Average of 5 years of risk costs	ORM	1,434,127	5 Year average, annual cost
Property tax rate - general fund	PSB / DOA	0.61	per 1,000 AV; 2019 number
Property tax rate roads	PSB / DOA	1.67	per 1,000 AV; 2019 number
Road miles in system	Roads	1500	Updated annually
Roads annual operating budget	Roads	108,900,000	Half of biennial operating budget
Roads costs for clean-up	Roads	100,000	Total annual costs; future average
DLS Processing costs	N/A	-	N/A

**Square footage and lineal measurement of vacation area:**

Parcel size in square feet	Roads	20139	Square footage of vacation area
Parcel size in lineal feet		671	
Parcel size in "road mileage"		0.127083333	

**\* Value of vacation area from Assessor's Office:**

Parcel 222507-9012 will not change in value after the vacation adds 20139 square feet

Value of vacation area \$0

**VALUATION OF ROADS RIGHT-OF-WAY**

Based on PSB Response to Proviso

**V-2692**  
**Ordinance 2018-0406**

**Parcel 222507-9025**

Portion of NE 32nd Street, County Road No. 1334

Factor	Opened Roads	Frequently Traversed Public Areas	Undeveloped Unopened ROW
Appraised Value	\$ 10,500	\$ 10,500	\$ 10,500
Subtract: Transfer of Liability or Risk	\$ 1,223	\$ 122	\$ 0
Subtract: Expected Property Taxes	\$ 206	\$ 206	\$ 206
Subtract: Management and Maintenance Costs	\$ 92,853	\$ 0	\$ 2,000
DLS Processing Costs	\$ 0	\$ 0	\$ 0
<b>TOTAL</b>	<b>\$ (83,782)</b>	<b>\$ 10,171</b>	<b>\$ 8,294</b>

**ANNUAL UPDATES:**

The factors identified in the table need to be updated annually. These include:

- 1) Claims, judgments, settlements, and reserved expenses per mile. The Office of Risk Management Services has developed a complete methodology for this calculation.
- 2) General Fund and Roads Fund property tax rates.
- 3) Total road mileage in the system.
- 4) Roads operating budget (use half of the biennial budget).

Factor:	Provider:	Number	Varies per parcel
Value of vacation area	DOA	10,500	Varies per parcel
"Mileage" of parcel	DOA	0.13	Parcel size in linear mileage
Average of 5 years of risk costs	ORM	1,434,127	5 year average, annual cost
Property tax rate - general fund	PSB / DOA	0.61	per 1,000 AV; 2019 number
Property tax rate roads	PSB / DOA	1.67	per 1,000 AV; 2019 number
Road miles in system	Roads	1500	Updated annually
Roads annual operating budget	Roads	108,900,000	Half of biennial operating budl
Roads costs for clean-up	Roads	100,000	Total annual costs; future aver
DLS Processing costs	N/A	-	N/A

**Square footage and lineal measurement of vacation area:**

Parcel Size in square feet	Roads	21146	Square footage of vacation area
Parcel size in lineal feet		704.9	
Parcel size in "road mileage"		0.133503788	

\* Value of vacation area from Assessor's Office:  
Parcel 222507-9025 - vacation of 21146 square feet

Value of vacation area \$10,500

**VALUATION OF ROADS RIGHT-OF-WAY**

Based on PSB Response to Proviso

**V-2692**  
**Ordinance 2018-0406**

**Parcel 222507-9027**

Portion of NE 32nd Street, County Road No. 1334

Factor	Opened Roads	Frequently Traversed Public Areas	Undeveloped Unopened ROW
Appraised Value	\$ -	\$ -	\$ -
Subtract: Transfer of Liability or Risk	\$ 914	\$ 91	\$ 0
Subtract: Expected Property Taxes	\$ -	\$ -	\$ -
Subtract: Management and Maintenance Costs	\$ 69,393	\$ 0	\$ 2,000
DLS Processing Costs	\$ 0	\$ 0	\$ 0
<b>TOTAL</b>	<b>\$ (70,307)</b>	<b>\$ (91)</b>	<b>\$ (2,000)</b>

**ANNUAL UPDATES:**

The factors identified in the table need to be updated annually. These include:

- 1) Claims, judgments, settlements, and reserved expenses per mile. The Office of Risk Management Services has developed a complete methodology for this calculation.
- 2) General Fund and Roads Fund property tax rates.
- 3) Total road mileage in the system.
- 4) Roads operating budget (use half of the biennial budget).

Factor:	Provider:	Number	Update Frequency
Value of vacation area	DOA	-	See below *
"Mileage" of parcel	ORM	0.10	Parcel size in linear mileage
Average of 5 years of risk costs	PSB / DOA	1,434,127	5 year average, annual cost
Property tax rate - general fund	PSB / DOA	0.61	per 1,000 AV; 2019 number
Property tax rate roads	PSB / DOA	1.67	per 1,000 AV; 2019 number
Road miles in system	Roads	1500	Updated annually
Roads annual operating budget	Roads	108,900,000	Half of biennial operating bud; Updated annually
Roads costs for clean-up	Roads	100,000	Total annual costs; future aver; Updated annually
DLS Processing costs	N/A	-	N/A

**Square footage and lineal measurement of vacation area:**

Parcel Size in square feet	Roads	15806	Square footage of vacation area
Parcel size in lineal feet		526.8	
Parcel size in "road mileage"		0.099772727	

**\* Value of vacation area from Assessor's Office:**

Parcel 222507-9027 - vacation of 15806 square feet

Value of vacation area

\$0

**VALUATION OF ROADS RIGHT-OF-WAY**

Based on PSB Response to Proviso

**V-2692**  
**Ordinance 2018-0406**

**Parcel 222507-9034**

Portion of NE 32nd Street, County Road No. 1334

Factor	Opened Roads	Frequently Traversed Public Areas	Undeveloped Unopened ROW
Appraised Value	\$ 1,000	\$ 1,000	\$ 1,000
Subtract: Transfer of Liability or Risk	\$ 1,243	\$ 124	\$ 0
Subtract: Expected Property Taxes	\$ 20	\$ 20	\$ 20
Subtract: Management and Maintenance Costs	\$ 94,351	\$ 0	\$ 2,000
DLS Processing Costs	\$ 0	\$ 0	\$ 0
<b>TOTAL</b>	<b>\$ (94,613)</b>	<b>\$ 856</b>	<b>\$ (1,020)</b>

**ANNUAL UPDATES:**

The factors identified in the table need to be updated annually. These include:

- 1) Claims, judgments, settlements, and reserved expenses per mile. The Office of Risk Management Services has developed a complete methodology for this calculation.
- 2) General Fund and Roads Fund property tax rates.
- 3) Total road mileage in the system.
- 4) Roads operating budget (use half of the biennial budget).

Factor:	Provider:	Number	Notes
Value of vacation area	DOA	1,000	See below *
"Mileage" of parcel		0.14	Parcel size in linear mileage
Average of 5 years of risk costs	ORM	1,434,127	5 year average, annual cost
Property tax rate - general fund	PSB / DOA	0.61	per 1,000 AV; 2019 number
Property tax rate roads	PSB / DOA	1.67	per 1,000 AV; 2019 number
Road miles in system	Roads	1500	Updated annually
Roads annual operating budget	Roads	108,900,000	Half of biennial operating budget
Roads costs for clean-up	Roads	100,000	Total annual costs, future average
DLS Processing costs	N/A	-	N/A

**Square footage and lineal measurement of vacation area:**

Parcel Size in square feet	Roads	21488	Square footage of vacation area
Parcel size in lineal feet		716.27	
Parcel size in "road mileage"		0.135657197	

**\* Value of vacation area from Assessor's Office:**

Parcel 222507-9034 - vacation of 21,488 square feet

Value of vacation area \$1,000



**VALUATION OF ROADS RIGHT-OF-WAY**

Based on PSB Response to Proviso

**V-2692**  
**Ordinance 2018-0406**

**Parcel 222507-9001**

Portion of NE 32nd Street, County Road No. 1334

Factor	Opened Roads	Frequently Traversed Public Areas	Undeveloped Unopened ROW
Appraised Value	\$ 6,800	\$ 6,800	\$ 6,800
Subtract: Transfer of Liability or Risk	\$ 979	\$ 98	\$ 0
Subtract: Expected Property Taxes	\$ -	\$ -	\$ -
Subtract: Management and Maintenance Costs	\$ 74,372	\$ 0	\$ 2,000
DLS Processing Costs	\$ 0	\$ 0	\$ 0
<b>TOTAL</b>	<b>\$ (68,551)</b>	<b>\$ 6,702</b>	<b>\$ 4,800</b>

**ANNUAL UPDATES:**

The factors identified in the table need to be updated annually. These include:

- 1) Claims, judgments, settlements, and reserved expenses per mile. The Office of Risk Management Services has developed a complete methodology for this calculation.
- 2) General Fund and Roads Fund property tax rates.
- 3) Total road mileage in the system.
- 4) Roads operating budget (use half of the biennial budget).

Factor:	Provider:	Number	
Value of vacation area	DOA	6,800	See below *
"Mileage" of parcel	ORM	0.11	Parcel size in linear mileage
Average of 5 years of risk costs	PSB / DOA	1,434,127	5 year average, annual cost
Property tax rate - general fund	PSB / DOA	-	per 1,000 AV; 2019 number
Property tax rate roads	Roads	-	per 1,000 AV; 2019 number
Road miles in system	Roads	1500	Updated annually
Roads annual operating budget	Roads	108,900,000	Half of biennial operating budl
Roads costs for clean-up	Roads	100,000	Total annual costs; future aver
DLS Processing costs	N/A	-	N/A

**Square footage and lineal measurement of vacation area:**

Parcel Size in square feet	Roads	27311	Square footage of vacation area
Parcel size in lineal feet		564.6	
Parcel size in "oad mileage"		0.106931818	

**\* Value of vacation area from Assessor's Office:**

Parcel 222507-9001 - vacation of 27311 square feet  
 Value of vacation area \$6,800  
 Girl Scouts is a tax exempt entity and is not assessed property taxes