

ZONING AND LAND USE

Project Impacts on Residential Parcels

Abstract

The proposed PSE 230kV Talbot Hill/Lakeside Transmission Line Project would be constructed from the proposed Richards Creek Substation in the north to the Talbot Hill Substation in Renton in the south. Even though PSE bifurcated the project and the current application includes only south Bellevue and the cities of Newcastle and Renton, the data used in this report, describe the current land use with parcel count and length for *all* segments of the proposed transmission line project.

Of the 14.9 miles of the entire transmission corridor, residential land use comprises 42,997 linear feet which is over half of the total 78,794 linear feet. (53%)

The land-use parcels along this corridor are predominantly residential, whether directly adjacent to the corridor or 100 feet or 500 feet away. The Land Use Codes of the impacted cities were developed to maintain the integrity of the residential neighborhoods. The proposed power line would be within 500 feet of 2,711 residentially-zoned parcels, of which 2,085 are located in south Bellevue, Newcastle and Renton and the remaining 626 are located in north Bellevue and Redmond.

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1. Present Land Use Zone Data

The 230kV transmission line proposed by PSE would be constructed in land use zones that are predominantly residential.

The FEIS states 49 percent of the project includes land zoned for single-family and multi-family land use, based on King County Assessor data¹ The FEIS does not specify the exact methodology used in its analysis, but maintains that this percentage "*includes properties that are included in or abutting PSE's proposed alignment or in close proximity to the right of way.*"² It can be concluded from this analysis that land use is predominantly *residential* the transmission corridor .

Table 1 summarizes a land-use analysis based on parcel PRESENTUSE³ code. The table delineates the number of proposed powerline linear feet by present land use of parcel and shows the predominant land use in the transmission corridor as *residential*. Specifically, for the cities included in the current PSE applications, the following data is significant:

- South Bellevue residential use: 9,470 of 15,595 linear feet
- Newcastle residential use: 4,530 of 7,171 linear feet
- Renton residential use: 8,690 of 18,658 linear feet

Of the 14.9 miles of the entire transmission corridor in this analysis, residential land use comprises 42,997 linear feet which is over half of the total 78,794 linear feet. (53%)

¹ http://www.energizeeastsideis.org/uploads/4/7/3/1/47314045/chapter_4.1_land_use_and_housing.pdf page 3

² http://www.energizeeastsideis.org/uploads/4/7/3/1/47314045/chapter_4.1_land_use_and_housing.pdf page 1

³ https://www5.kingcounty.gov/sdc/FGDCDocs/KCA102_PRESENTUSE_PARCEL_faq.htm

Table 1**Number of Proposed Powerline Feet by Present Land Use Designation of Parcel**

Present Use	Count Parcels	EE Length	North of 520	Between 520 and I90	South of I90	Bellevue North	Bellevue South	Bellevue	Newcastle	Renton	Redmond	King County
Single family (residential use / zone)	256	36,773	11,236	5,150	20,387	14,223	8,679	22,902	4,300	6,110	2,163	1,298
School (Public)	5	4,869	1,311		3,559		899	899		2,660	1,311	
Utility, Public	7	4,575	3,062	626	888		1,332	1,332	181		3,062	
Golf Course	1	3,922		3,922		3,922		3,922				
Condominium (Residential)	8	3,791	2,622		1,169					1,169	2,622	
Park, Public (Zoo \ Abroretum)	4	3,726		1,332	2,394	1,332	1,982	3,314		412		
Open Space (Curr Use-RCW84.34)	6	3,232	1,302		1,931	1,302		1,302		1,931		
Unknown	8	3,191	1,322	272	1,597	272		272	1,517	80	1,322	
Mortuary / Cemetary / Crematory	2	2,943		2,001	943	2,001		2,001	943			
Right of Way / Utility, Road	3	2,153			2,153					2,153		
Apartment	5	1,937		663	1,274		791	791	61	1,084		
Industrial Park	4	1,778		322	1,456		322	322		1,456		
Warehouse	2	1,551		1,551		628	924	1,551				
Office building	4	1,264		931	333	931	333	1,264				
Sport Facility	2	723		388	335	388	335	723				
Single family (C/I Zone)	2	496			496				169	327		
Retail store	4	472		127	345	127		127		345		
Auto Showroom and Lot	1	454		454		454		454				
Shopping Center (Neighborhood)	1	309			309					309		
Church / Welfare / Religious Service	2	247			247					247		
Open Space Timber Land / Greenbel	1	241			241					241		
Club	1	134			134					134		
Easement	1	12	12			12		12				
Total	330	78,794	20,867	17,738	40,190	25,590	15,595	41,186	7,171	18,658	10,481	1,298
Miles		14.9	4.0	3.4	7.6	4.8	3.0	7.8	1.4	3.5	2.0	0.2

(Data and methodology provided by Deron Ferguson)

Note that three categories of use indicated vacant parcels (vacant single-family, vacant multi-family, and vacant industrial) and were grouped with other categories for simplified presentation (single-family, apartment, and industrial park, respectively.)⁴

Of the 14.9 miles of the entire transmission corridor, residential land use comprises 42,997 linear which is over half of the total 78,794 linear feet. (53%)

⁴ https://www5.kingcounty.gov/sdc/FGDCDocs/KCA102_PRESENTUSE_PARCEL_faq.htm

The number of linear feet shown in the Tables 1,2 and 3 relate specifically to parcels that are crossed by the line and do not include parcels that are adjacent or some distance away from the transmission line. Included as residential: Single family, condominium, apartment and single family (C/1zone).

Table 2
Powerline Linear Feet Crossing Residential Parcels

Location	Total Powerline Linear Feet	Single Family Residential	Single Family C/1	Condominium Residential	Apartment	TOTAL RESIDENTIAL	PERCENT RESIDENTIAL
South Bellevue	15,595	8,679			791	9,470	60.7%
Newcastle	7,171	4,300	169		61	4,530	63.2%
Renton	18,658	6,110	327	1,169	1,084	8,690	46.6%
North Bellevue	25,590	14,223				14,223	55.6%
Redmond	10,481	2,163		2,622		4,785	45.7%
King Co	1,298	1,298				1,298	100.0%
Total linear feet	78,793	36,773	496	3,791	1,936	42,996	54.6%

In south Bellevue and Newcastle, the percent of proposed powerline linear feet passing through residential-use designated parcels is greater than the 54.6 percent calculated for the entire transmission corridor.

Other land-use parcels are closely related to residential land use. These could be called "quasi-residential" and would include parcels designated for schools, golf courses, parks and public spaces, open space and open timber. As shown in Table 3, these parcel designations would add another 15,992 linear feet or 20.3 percent to the land that would be impacted by the proposed project.

Table 3
Powerline Linear Feet Crossing Residential + Quasi-Residential Parcels

Location	Total Powerline Linear Feet	TOTAL RESIDENTIAL	TOTAL QUASI RESIDENTIAL	TOTAL RESIDENTIAL + QUASI RES	PERCENTAGE RESIDENTIAL + QUASI-RES
South Bellevue	15,595	9,470	2880	12,350	79.2%
Newcastle	7,171	4,530		4,530	63.2%
Renton	18,658	8690	5244	13,934	74.7%
North Bellevue	25,590	14,223	6555	20,778	81.2%
Redmond	10,481	4,785	1311	6,096	58.2%
King Co	1,298	1,298		1,298	100.0%
Total linear feet	78,793	42,996	15,990	58,986	74.9%

By adding the linear feet of powerline that would pass through "quasi-residential" land-use designations. 74.9 percent of the proposed powerline would cross over parcels with a neighborhood or park-like character. (Table 4 in the Appendix for further details about the distribution of "quasi-residential" land use zones in each city.)

The previous data show that the *number of linear feet* directly under the proposed 230kV power line are now zoned predominantly as *residential*.

Table 5 in the appendix shows the actual *number of parcels by neighborhood plats* that would be under or within 100 or 500 feet of the proposed 230 kV powerline. The results are summarized below:

- Under the line - 363 residentially-zoned parcels
- 100 feet from the edge of the transmission corridor – 282 residentially-zoned parcels
- 500 feet from the edge of the transmission corridor – 2,066 residentially-zoned parcels

The proposed power line would impact a total of 2,711 parcels zoned as *residential*. Of these parcels, 2,085 are located in south Bellevue, Newcastle and Renton and the remaining 626 are located in north Bellevue and Redmond.

2. Relevant Land Use Codes

LUC 20.20.255D2d identifies a preferred site selection when considering any new or expanding electrical utility facility. A residential land use district is the last in the hierarchy of districts.

LUC 20.30B.140B recommends criteria in design that is compatible and responds to the intended character and appearance of the property and immediate vicinity. Power poles 90-100 feet in height and 3-5 feet in diameter at the base are not compatible with nor respond to the intended character of the residential neighborhoods on the Eastside.

LUC 20.20.255Eb states that the preferred site location be within the land use district requiring additional service, avoiding residential land use districts.

3. Conclusion

It can be concluded from the data presented in the FEIS and the data used in this report from the King GIS Center that the land use in the transmission corridor is predominantly *residential*. If parks, golf courses and open spaces that residents enjoy are included as quasi-residential, then the percentage of linear feet with a neighborhood character that would be crossed by the proposed 230kV transmission line increases from 54.6 percent to 74.9 percent.

All the data presented by CENSE and its expert witnesses corroborate that PSE's transmission line proposal would not follow the guidelines of cities' land use codes. If PSE's applications were approved, an industrial-sized transmission line would be built through *residential* neighborhoods even when the "presumed" need is in the *commercial* zones of Bellevue. Residential neighborhoods would bear most of the aesthetic, environmental, and safety impacts of PSE's. If increased electrical demand is created by warehouses, office buildings or industrial parks, alternatives to a 230kV transmission line are available that could be located within the land-use districts requiring additional service.

The Energize Eastside project would dramatically change the intended character of the predominantly *residential* districts along the corridor. Maintaining the integrity of *residential* neighborhoods should be a priority when considering this proposal, as that priority is codified in city land use codes.

Denying this proposal will preserve the intended character of the residential neighborhoods.

4. Appendix: data methodology and charts

Sources for Table 1,2,3

Number of Proposed Powerline Feet by Present Land Use of Parcel

Data Element	Source File/Variable	Source Organization
Parcel PRESENTUSE code.	PARCEL_ADDRESS	ftp://ftp.kingcounty.gov/gis-web/GISData/landuse_kc_consol_20_SHP.zip
Powerline (map layer)	Manually digitized*	CENSE

A description for the parcel present use code is provided here at the following URL:

https://www5.kingcounty.gov/sdc/FGDCDocs/KCA102_PRESENTUSE_PARCEL_faq.htm

* Spatial data is not available from PSE for the proposed power line, so CENSE digitized its route based on the existing route as determined by aerial imagery and proximity to parcel boundaries, as well as other published non-spatial data from PSE (the Environmental Impact Statement, permit applications, etc.

Table 4

Powerline Linear Feet Crossing Quasi-Residential Parcels

Location	Total Powerline Linear Feet	School Public	Golf Course	Park	Open Space RCW84.34	Open Space Timber Grnbelt	TOTAL QUASI RESIDENTIAL	PERCENT QUASI RESIDENTIAL
South Bellevue	15,595	899		1982			2,881	18.47%
Newcastle	7,171						0	0.00%
Renton	18,658	2660		412	1931	241	5,244	28.11%
North Bellevue	25,590		3922	1332	1302		6,556	25.62%
Redmond	10,481	1311					1,311	12.51%
King Co	1,298						0	0.00%
Total linear feet	78,793						15,992	20.30%

Linear feet and percent of proposed power line that would cross over quasi-judicial parcels, by city.

Table 5 Number of Residential Parcels within 500 of Proposed Power Line

plat	avg residential value	approx area	total parcels	residential parcels	condo units	min distance	avg distance	parcels on line	parcels within 100 ft	parcels within 500 ft	names on mailing list	members
BURKE-FARRARS KIRKLAND DIV NO. 12	601,767	Redmond	73	73	0	50	717	0	4	23	8	0
GREENTREE ESTATES	480,436	Redmond	39	39	0	0	267	10	1	32	25	0
ROSEWOOD PARK NO. 02	532,571	Redmond	14	14	0	40	127	3	5	14	14	0
MERRYWOOD NO. 03	489,500	Redmond	18	18	0	44	188	2	4	18	5	0
STRATTONWOOD ADD	529,810	Redmond	58	58	0	9	626	7	0	14	14	0
TALLYHO NO. 04	555,259	Redmond	58	58	0	95	456	0	2	31	11	0
BIRCHWOOD	508,323	Redmond	31	31	0	95	668	0	3	11	5	0
SIXTY-01 AMENDED		Redmond	8	0	465	0	1	6	0	8	429	0
CANTERWOOD	1,314,667	Bridle Trails	12	12	0	0	144	5	0	12	12	0
BRENTWOOD LANE	995,143	Bridle Trails	14	14	0	0	526	2	0	6	2	0
O FARRELLS BRIDLE TRAILS	1,138,913		23	23	0	87	591	0	4	9	0	0
TRAILS END ADD	1,000,905	Bridle Trails	42	42	0	0	284	13	1	32	12	5
BEAU CHEVAL ADD	1,162,800	Bridle Trails	10	10	0	0	454	2	0	6	9	1
CEDAR HIGHLANDS ADD	922,900	Bridle Trails	10	10	0	0	441	2	0	6	8	0
NEWCASTLE ESTATES	1,351,714	Bridle Trails	7	7	0	44	309	0	2	5	6	0
GLENWOOD ACRES	1,201,647	Bridle Trails	17	17	0	0	452	3	0	9	15	1
BELLEAIRE ESTATES	1,252,429	Bridle Trails	7	7	0	63	304	0	3	5	5	0
SHADOW WOOD LANE	1,103,692	Bridle Trails	13	13	0	0	529	2	1	6	12	1
CANTER GREEN	2,060,733	Bridle Trails	15	15	0	0	326	3	0	12	12	3
GLENGROVE LANE	1,113,545	Bridle Trails	11	11	0	65	270	0	4	8	9	1
KANTOR LANE HEIGHTS ADD	913,231	Bridle Trails	13	13	0	0	192	7	0	11	12	2
MEADOW WOOD	1,059,200	Bridle Trails	5	5	0	0	173	1	1	5	5	0
DARBY LANE	1,100,818	Bridle Trails	11	11	0	0	213	2	2	10	10	1
WESTMINSTER ESTATES	946,267	Bridle Trails	15	15	0	18	504	0	2	8	13	0
BELLEVUE GARDENS ADD	980,765	EBCC	34	34	0	0	565	7	0	11	5	0
CALIDAD HOUSE		EBCC	1	0	23	84	84	0	1	1	23	0
TITONKA PARK NO. 03	876,115	EBCC	26	26	0	92	548	0	1	13	12	0
FERNDAL	704,833	EBCC	18	18	0	68	626	0	3	7	7	0
DORALEE ACRES ADD	919,541	Olympus	36	36	0	0	541	5	0	17	15	0
SKYRIDGE DIV NO. 05	667,636	EBCC	55	55	0	0	415	10	1	35	29	2
BELLEVUE WOODS	913,444	EBCC	9	9	0	0	88	4	1	9	8	0
SKYRIDGE DIV NO. 04	643,457	EBCC	35	35	0	0	155	12	1	35	22	1
WOODMOOR DIV NO. 01	640,588	EBCC	17	17	0	0	133	7	0	17	16	2
BANNERWOOD ADD	471,370	EBCC	46	46	0	17	356	0	8	32	24	0
EASTGATE ADD DIV K	478,046	Olympus	131	131	0	0	353	22	5	90	25	0
SOMERSET NORTH SLOPE	995,368	Somerset	57	57	0	0	463	7	2	33	20	5
SOMERSET NO. 16	855,429	Somerset	7	7	0	0	128	3	1	7	5	1
SOMERSET NO. 06	835,646		82	82	0	88	724	0	1	17	0	0
SOMERSET RIDGE	1,176,400	Somerset	20	20	0	0	538	2	2	10	6	0
SOMERSET ADD	1,044,290	Somerset	62	62	0	0	185	13	4	62	36	7
SOMERSET NO. 08	937,101	Somerset	178	178	0	0	407	31	2	115	47	12
SOMERSET NO. 15	1,204,146	Somerset	48	48	0	0	219	12	1	45	44	19
EDGEWOOD PARK	622,412	Somerset	51	51	0	0	471	4	3	30	9	1
FORESTHILL NO. 02	920,894	Somerset	66	66	0	30	403	2	7	43	11	2

plat	avg residential value	approx area	total parcels	residential parcels	condo units	min distance	avg distance	parcels on line	parcels within 100 ft	parcels within 500 ft	names on mailing list	members
NEWPORT HILLS NO. 09	607,188	Newcastle	32	32	0	0	219	7	3	30	18	0
NEWPORT HILLS NO. 12	585,511	Newcastle	45	45	0	0	212	11	2	41	18	0
DEL MAR WOODS DIV NO. 01	588,188	Olympus	80	80	0	0	362	11	3	55	12	0
OAKS THE	584,639	Newcastle	36	36	0	97	345	0	3	33	3	0
DEL MAR WOODS DIV NO. 03	526,727	Newcastle	33	33	0	0	325	5	4	23	9	0
DEL MAR WOODS DIV NO. 05	506,222	Newcastle	9	9	0	0	80	3	2	9	5	0
NEWPORT WOODS ADD	471,609	Newcastle	87	87	0	40	626	2	5	33	7	0
DONEGAL	456,740	Olympus	119	119	0	0	462	5	19	73	24	0
LAKE BOREN SUBDIV	591,350	Olympus	19	19	0	0	360	1	1	13	2	0
OLYMPUS DIV NO. 02	587,872	Olympus	76	76	0	39	608	0	4	28	3	0
OLYMPUS	600,226	Olympus	137	137	0	0	160	33	23	136	100	19
EDEN'S GROVE	759,094	Newcastle	32	32	0	13	254	1	6	31	12	1
HILLMANS LAKE WASH GARDEN OF EDEI	426,750	Renton	32	32	0	0	651	1	2	10	4	0
BALCHS ALBERT SIERRA HEIGHTS NO. 04	286,292	Renton	48	48	0	32	241	0	12	43	10	0
HONEY CREEK RIDGE DIV NO. 03	575,098	Renton	41	41	0	0	211	6	11	36	16	0
BALCHS ALBERT SIERRA HEIGHTS NO. 05	407,167	Renton	6	6	0	0	131	1	2	6	4	0
SIR CEDRIC			1	0	0	0	0	1	0	1	0	0
GRACELAND TERRACE	297,725	Renton	43	40	0	0	135	13	5	43	18	0
SKYLAND HEIGHTS NO. 02	273,667	Renton	15	15	0	0	0	15	0	15	14	0
SKYLAND HEIGHTS NO. 01	287,714		21	21	0	87	135	0	11	21	0	0
LIBERTY RIDGE PHASE 02	355,175	Renton	40	40	0	38	362	0	5	28	6	0
LIBERTY RIDGE PHASE 1	370,458	Renton	120	120	0	39	341	0	21	95	21	0
LIBERTY RIDGE PH 06	382,556	Renton	117	117	0	72	775	0	2	25	7	0
LIBERTY RIDGE PH 04	400,879	Renton	33	33	0	88	419	0	7	19	7	0
LIBERTY RIDGE PH 03	374,237	Renton	38	38	0	76	208	0	13	38	14	0
SHADOW HAWK II PH 01			1	0	0	0	0	1	0	1	0	0
SHADOW HAWK I			1	0	0	47	47	0	1	1	0	0
No Plat Name	913,733		856	827	0	0	739	35	32	249	160	5
			3,621					363	282	2,066	1,511	92

Source: King County parcel database and CENSE mailing list address collection; the two datasets were joined on parcel address = CENSE mailing list address

Scope: All neighborhoods with at least one single- or multi-family residential parcel within a quarter mile of the proposed powerline (commercial and other use type parcels not included)

Count of residential parcels: 9,191; count of all mailing list records: 2,097 (matched to parcels: 1,932; unmatched: 165)

Table is roughly ordered from north to south

The number of parcels described as “on the line” (363) is a little higher than the number of parcels intersecting the line shown in the table above. This is because, in this tabulation, we include parcels whose property edge is within 10 feet of the line as being “on the line” (That is, we create a 10-foot buffer around the line and then intersect that with the parcels). For example, we might have a case where the power line runs along within 10 feet of a property’s edge; in that case, we also include the adjoining property, which is within 10 feet, as “on the line.”

plat: plat name, if exists, from the parcel database

avg residential value: land + improved assessment value from parcel database

approx area: "area" tag added by CENSE during address collection (max value in plat)

total parcels: count of unique parcel numbers within the plat

residential parcels: count of single family residential parcels within the plat

condo units: count of unique addresses of condo units within the plat (if we have them)

min distance: the distance of the closest parcel in the plat to the power line

avg distance: the average distance of all parcels within the plat

parcels on line: the count of parcels with distance=0 OR trees > 0 OR poles > 0 (i.e, impacted parcels)

parcels within 100 ft: count of parcels *not* on line but within 100 feet of the power line

parcels within 500 ft: count of all parcels within 500 feet of the power line

names on mailing list: the count of unique CENSE addresses linked to parcels within the plat

members: the count of unique CENSE address flagged as "member"