

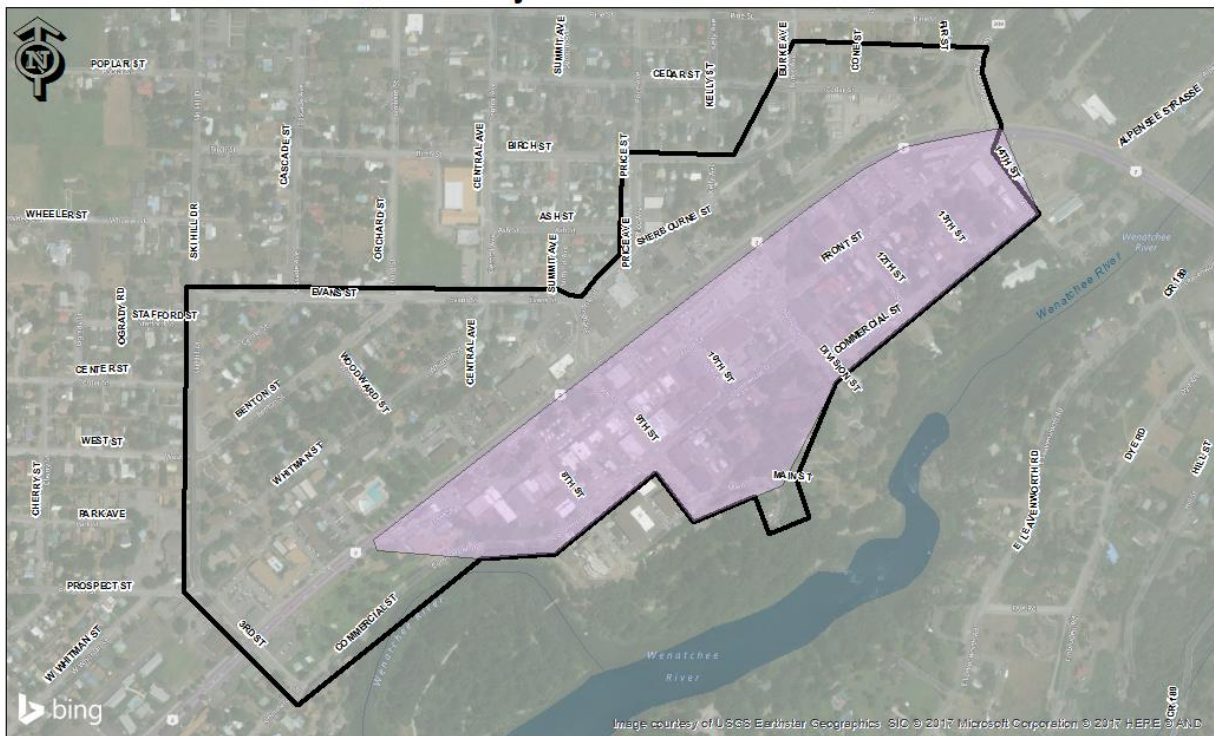
City of Leavenworth, WA
Analysis: Revenue/Expense Scenarios
Core Zone: On-Street Paid Parking System
March 15, 2018 (v2)

I. BACKGROUND

The analysis provided here estimates expense and revenue generation potential for an on-street pay to park system in downtown Leavenworth. For purposes of analysis, the model would establish a “pay-to-park district” within the “core zone” of the larger 846 stall study area of the 2017 Downtown Parking Study. The “core zone” represents 512 stalls on streets located between Highway 2 and Commercial Street between 14th Street and just southwest of Whitman Street (see **Figure A**, below).

This is a *first run analysis* intended to inform and facilitate discussion of paid on-street parking within the City of Leavenworth and with downtown stakeholders. This is not intended to be a definitive model for a paid parking system. The consultant anticipates that revisions will be made as discussion and review moves forward.

Figure A:
Parking Study Area and Core Zone



Parking Study and Core Area

2017

Core Study Area
 Parking Study Area

II. BASE LEVEL MODEL ASSUMPTIONS

1. 512 stalls within pay-to-park district downtown served by 51 pay stations.
2. Revenue estimates based on actual vehicle hours parked (summer peak 2017) with an off-peak season assumed at 60% of peak season
3. 300 day operating year.
4. Hourly rate scenarios of \$1.25, \$1.50, \$1.75 and \$2.00.
5. Pay station operating and debt service coverage based on reasonable estimate of on-street parking from comparable cities.
6. Net revenue assumptions make no recommendations regarding allocation of such revenues.
7. 5 year pay back of City's cost of purchasing and installing parking pay stations.
8. Does not account (at this time) for enforcement revenue. Cost of enforcement personnel is included.
9. ALL HOURLY RATE SCENARIOS GENERATE POSITIVE NET REVENUE AFTER DEBT AND OPERATING EXPENSES.

SUMMARY OF NET REVENUE (846 Stalls)

Period	Rate	Estimated Annual Net Revenue
1- 5 YRS	\$1.25	\$665,969
1- 5 YRS	\$1.50	\$869,965
1- 5 YRS	\$1.75	\$1,073,961
1- 5 YRS	\$2.00	\$1,277,958
6-20 YRS		
6 -20 YRS	\$1.25	\$809,760
6 -20 YRS	\$1.50	\$1,013,756
6 -20 YRS	\$1.75	\$1,217,752
6 -20 YRS	\$2.00	\$1,421,749

III. VEHICLE HOURS SUMMARY

Total stalls in pay-to-park "core zone"	512	
Total Revenue Hours (2017 Thursday)[a]	4,017	
Total Revenue Hours (2017 Saturday)[b]	4,783	
Averaged Total Revenue Hours (Peak @ 6 days)	4,145	[c]
Less Leakage @ 15%	-622	[d]
	0	
PEAK SEASON DAILY AVG	3,523	
Total Revenue Hours (Off-peak @ 6 days)	2,487	
Less Leakage @ 15%	-373	
OFF PEAK DAILY AVG	2,114	
TOTAL HRS PEAK SEASON	528,488	Assumes 150 days
TOTAL HRS OFF-PEAK SEASON	317,093	Assumes 150 days
TOTAL ANNUAL "REVENUE HOURS"	845,580	
Combined AVG Daily Revenue Hours	2,819	[e]
[a] From 2017 license plate study - July 20, 2017		
[b] From 2017 license plate study - July 22, 2017		
[c] 5 days at [a] plus one day at [b] divided by 6 days		
[d] Factor for cars moving off-street and/or to free parking areas		
[e] Average daily revenue hours factored for one year - 300 operating days		

IV. KEY MODEL INPUTS

DEBT TO CARRY			
Cost of meter system			\$ 347,904
One time cost of any collateral equipment - signage			\$ 25,600
One time cost of installing pay station units			\$ 28,160
One time cost of removing existing meters			\$ -
One time cost computers, phones, vehicle			\$ 10,500
One time handheld technology upgrade for pay stations			\$ 35,000
Warranty at 5 years			\$ 128,000
Total Debt to carry for five years			\$ 575,164
Total Debt @ 5% financing			\$ 718,955
Annual expense over 5 years			\$ 143,791
Annual cost per metered space @ 5 years			\$ 281
Debt - Daily cost per metered space @ 5 years			0.94
OPERATIONS			
<i>Enforcement</i>			
Total stalls enforced			512
Total enforcement hours (40 hrs/wk)			40
Total enforcement hours (per day)			7
Assumed hourly rate for enforcement (fully loaded)			\$ 20.00
# enforcement days (weekdays)			300
Cost per day in meter district (enforcement/collection)			\$ 133
Cost per enforcement year			\$ 40,000
<i>Management/Maintenance/Support</i>			
Maintenance Technician and/or equipment repair			\$ 20,000
Enforcement Supervisor			\$ -
Office Space			\$ -
On-going supplies and fees			\$ 150,221
Cost for support/maintenance/annual			\$ 170,221
Cost per stall per day			\$ 1.37
Cost per stall per year			\$ 411
* All costs are distributed as a prorata share of operations based on 300 days of service.			
BASE INPUTS			
<i>Start Up</i>			
Paystations, displays and locks	\$ 6,795	per unit	
Parking Signs - Construction and Install	\$ 500	per unit	
Installation of pay station	\$ 500	per unit	
Prep work for installation	\$ 50	per unit	
Computers, phones, vehicle (support)	\$ 10,500		
<i>On-going</i>			
Credit Card Transaction fees	3.5%	of gross rev.	
Paystation Back-office processing contract	\$ 125	per unit/mo.	
Paystation Help Desk	\$ 45	per unit/mo.	
Wireless contract	\$ 43	per unit/mo.	
Meter receipt paper	\$ 25	per unit/mo.	
Operating supplies	\$ 7	per unit/mo.	
Warranty (for five years)	\$ 500	per unit/yr.	

V. REVENUE/EXPENSES BY SCENARIO

Scenario A:	@ hourly rate of	\$1.25	Per Day Metered Stall	Annual Per Metered Stall	Annual for District
Gross Revenue			\$6.88	\$2,064.40	\$1,056,975
Operating Expense (YR 1 - 5)*			\$2.55	\$763.68	\$391,006
Net Revenue (YR 1 - 5)			\$4.34	\$1,300.72	\$665,969
Operating Expense (YR 6-20)			\$1.61	\$482.84	\$247,215
Net Revenue (YR 6-20)			\$5.27	\$1,581.56	\$809,760
(*) Five year carrying cost for pay stations @ 5% annual financing					
Scenario B:	@ hourly rate of	\$1.50	Per Day Metered Stall	Annual Per Metered Stall	Annual for District
Gross Revenue			\$8.26	\$2,477.29	\$1,268,370
Operating Expense (YR 1 - 5)			\$2.59	\$778.13	\$398,405
Net Revenue (YR 1 - 5)			\$5.66	\$1,699.15	\$869,965
Operating Expense (YR 6-20)			\$1.66	\$497.29	\$254,614
Net Revenue (YR 6-20)			\$6.60	\$1,979.99	\$1,013,756
Scenario C:	@ hourly rate of	\$1.75	Per Day Metered stall	Annual Per Metered Stall	Annual for District
Gross Revenue			\$9.63	\$2,890.17	\$1,479,765
Operating Expense (YR 1 - 5)			\$2.64	\$792.59	\$405,804
Net Revenue (YR 1 - 5)			\$6.99	\$2,097.58	\$1,073,961
Operating Expense (YR 6-20)			\$1.71	\$511.74	\$262,013
Net Revenue (YR 6-20)			\$7.93	\$2,378.42	\$1,217,752
Scenario D:	@ hourly rate of	\$2.00	Per Day Metered stall	Annual Per Metered Stall	Annual for District
Gross Revenue			\$11.01	\$3,303.05	\$1,691,160
Operating Expense (YR 1 - 5)			\$2.69	\$807.04	\$413,202
Net Revenue (YR 1 - 5)			\$8.32	\$2,496.01	\$1,277,958
Operating Expense (YR 6-20)			\$1.75	\$526.19	\$269,411
Net Revenue (YR 6-20)			\$9.26	\$2,776.85	\$1,421,749

VI. SUMMARY

The initial analysis of expenses and revenues associated with an on-street pay-to-park system in downtown Leavenworth estimates positive net revenue under four different hourly rate scenarios. Estimates for the cost (expense) of enforcement have been estimated in the model, though estimates of citation revenue have not.

It is hoped that the analysis provided here informs and facilitates discussion by the City and stakeholders of pay-to-park strategies for the on-street parking system in downtown Leavenworth. Input derived from review and discussion will result in revisions and improvements to this initial model run.

YEAR TO YEAR DETAIL (20 YEAR FORECAST)

Net Revenue by hourly rate		YR 1	YR 2	YR 3	YR 4	YR 5	YR 6	YR 7	YR 8
	Gross	\$ 1,056,975	\$ 1,083,399	\$ 1,110,484	\$ 1,138,246	\$ 1,166,703	\$ 1,195,870	\$ 1,225,767	\$ 1,256,411
	Expense	\$ 391,006	\$ 398,826	\$ 406,803	\$ 414,939	\$ 423,237	\$ 309,019	\$ 315,199	\$ 321,503
A. At \$1.00	NET	\$ 665,969	\$ 684,573	\$ 703,682	\$ 723,308	\$ 743,465	\$ 886,852	\$ 910,568	\$ 934,908
	Gross	\$ 1,268,370	\$ 1,300,079	\$ 1,332,581	\$ 1,365,896	\$ 1,400,043	\$ 1,435,044	\$ 1,470,920	\$ 1,507,693
	Expense	\$ 398,405	\$ 406,373	\$ 414,500	\$ 422,790	\$ 431,246	\$ 318,267	\$ 324,633	\$ 331,125
B. At \$1.25	NET	\$869,965	\$893,706	\$918,081	\$943,105	\$968,797	\$1,116,777	\$1,146,288	\$1,176,568
	Gross	\$ 1,479,765	\$ 1,516,759	\$ 1,554,678	\$ 1,593,545	\$ 1,633,384	\$ 1,674,218	\$ 1,716,074	\$ 1,758,976
	Expense	\$ 405,804	\$ 413,920	\$ 422,198	\$ 430,642	\$ 439,255	\$ 327,516	\$ 334,066	\$ 340,747
C. At \$1.50	NET	\$ 1,073,961	\$ 1,102,839	\$ 1,132,480	\$ 1,162,903	\$ 1,194,129	\$ 1,346,703	\$ 1,382,008	\$ 1,418,228
	Gross	\$ 1,691,160	\$ 1,733,439	\$ 1,776,775	\$ 1,821,194	\$ 1,866,724	\$ 1,913,392	\$ 1,961,227	\$ 2,010,258
	Expense	\$ 413,202	\$ 421,466	\$ 429,896	\$ 438,494	\$ 447,264	\$ 336,764	\$ 343,500	\$ 350,370
D. At \$1.75	NET	\$ 1,277,958	\$ 1,311,973	\$ 1,346,879	\$ 1,382,701	\$ 1,419,461	\$ 1,576,628	\$ 1,617,728	\$ 1,659,888
Net Revenue by hourly rate		YR 9	YR 10	YR 11	YR 12	YR 13	YR 14	YR 15	YR 16
	Gross	\$ 1,287,821	\$ 1,320,017	\$ 1,353,017	\$ 1,386,843	\$ 1,421,514	\$ 1,457,052	\$ 1,493,478	\$ 1,530,815
	Expense	\$ 327,933	\$ 334,492	\$ 341,182	\$ 348,005	\$ 354,965	\$ 362,065	\$ 369,306	\$ 376,692
A. At \$1.00	NET	\$ 959,888	\$ 985,525	\$ 1,011,836	\$ 1,038,838	\$ 1,066,549	\$ 1,094,987	\$ 1,124,172	\$ 1,154,123
	Gross	\$ 1,545,386	\$ 1,584,020	\$ 1,623,621	\$ 1,664,211	\$ 1,705,817	\$ 1,748,462	\$ 1,792,174	\$ 1,836,978
	Expense	\$ 337,748	\$ 344,503	\$ 351,393	\$ 358,421	\$ 365,589	\$ 372,901	\$ 380,359	\$ 387,966
B. At \$1.25	NET	\$ 1,207,638	\$ 1,239,518	\$ 1,272,228	\$ 1,305,791	\$ 1,340,228	\$ 1,375,561	\$ 1,411,815	\$ 1,449,012
	Gross	\$ 1,802,950	\$ 1,848,024	\$ 1,894,224	\$ 1,941,580	\$ 1,990,119	\$ 2,039,872	\$ 2,090,869	\$ 2,143,141
	Expense	\$ 347,562	\$ 354,514	\$ 361,604	\$ 368,836	\$ 376,213	\$ 383,737	\$ 391,412	\$ 399,240
C. At \$1.50	NET	\$ 1,455,388	\$ 1,493,510	\$ 1,532,620	\$ 1,572,744	\$ 1,613,907	\$ 1,656,136	\$ 1,699,458	\$ 1,743,901
	Gross	\$ 2,060,514	\$ 2,112,027	\$ 2,164,828	\$ 2,218,948	\$ 2,274,422	\$ 2,331,283	\$ 2,389,565	\$ 2,449,304
	Expense	\$ 357,377	\$ 364,524	\$ 371,815	\$ 379,251	\$ 386,836	\$ 394,573	\$ 402,464	\$ 410,514
D. At \$1.75	NET	\$ 1,703,137	\$ 1,747,503	\$ 1,793,013	\$ 1,839,697	\$ 1,887,586	\$ 1,936,710	\$ 1,987,100	\$ 2,038,790

Net Revenue by hourly rate		YR 17	YR 17	YR 18	YR 19	YR 20
	Gross	\$ 1,569,085	\$ 1,608,312	\$ 1,648,520	\$ 1,689,733	\$ 1,731,977
	Expense	\$ 384,226	\$ 391,910	\$ 399,749	\$ 407,744	\$ 415,898
A. At \$1.00	NET	\$ 1,184,859	\$ 1,216,402	\$ 1,248,772	\$ 1,281,990	\$ 1,316,078
	Gross	\$ 1,882,902	\$ 1,929,975	\$ 1,978,224	\$ 2,027,680	\$ 2,078,372
	Expense	\$ 395,725	\$ 403,640	\$ 411,713	\$ 419,947	\$ 428,346
B. At \$1.25	NET	\$ 1,477,992	\$ 1,507,552	\$ 1,537,703	\$ 1,568,457	\$ 1,599,826
	Gross	\$ 2,196,719	\$ 2,251,637	\$ 2,307,928	\$ 2,365,627	\$ 2,424,767
	Expense	\$ 407,225	\$ 415,369	\$ 423,677	\$ 432,150	\$ 440,793
C. At \$1.50	NET	\$ 1,789,495	\$ 1,836,268	\$ 1,884,252	\$ 1,933,477	\$ 1,983,974
	Gross	\$ 2,510,537	\$ 2,573,300	\$ 2,637,632	\$ 2,703,573	\$ 2,771,163
	Expense	\$ 418,724	\$ 427,098	\$ 435,640	\$ 444,353	\$ 453,240
D. At \$1.75	NET	\$ 2,091,813	\$ 2,146,201	\$ 2,201,992	\$ 2,259,220	\$ 2,317,922