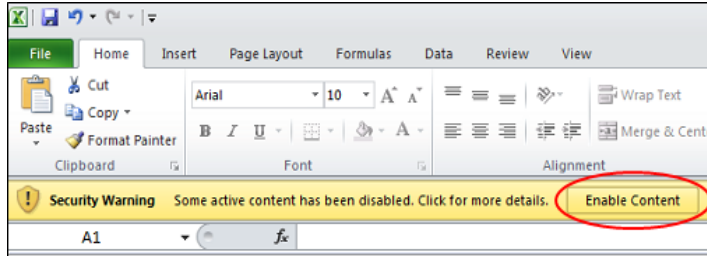# LADWP Zero By Design Whole Building Performance

Initiating the Workbook

When first opening the LADWP ZBD Workbook, you must "Enable Content". Otherwise, the LADWP ZBD workbook will not work as intended.

Project Information Sheet

The first sheet that will be available to you is the "Project Information" sheet. In this sheet, users will first have to provide owner, design team and project information.

Note: It is imperative that the project site address, zip code, and project building type are entered. If not, you will not be able to proceed.
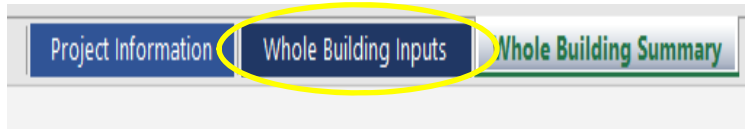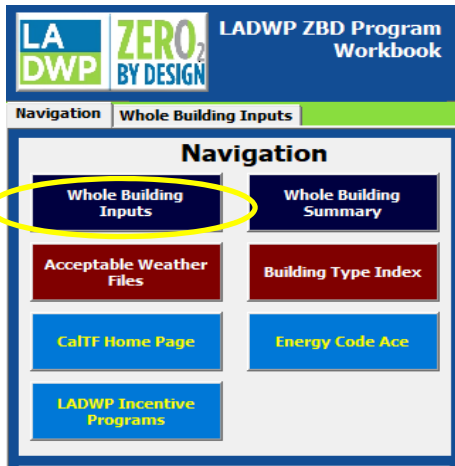
To view a list of the Building Type abbreviations and definitions, click the Building Type Index button.

After entering the project information, click the Whole Building Performance button and the Navigation box will appear.

Activating the Whole Building Inputs Sheet

Click the Whole Building Inputs button in the Navigation box or the Whole Building Inputs tab on the bottom of the page to initiate the Whole Building Inputs sheet.

## Completing the Whole Building Inputs Sheet

Begin by entering the Construction Completion Year. This is the year in which the project is planned to be completed. This information is necessary to calculate the incentive amount.

Entering Your Project Data into the Whole Building Inputs Sheet

Copy and paste the output data from your project's energy model into the Whole Building Inputs sheet. Make certain to paste the data as "values" into the correct number of cells (8,760 cells per column). If the data is pasted incorrectly, the worksheet will display an error message.

				Baseline Hourly Energy Usage by End Use									Proposed Hourly Energy Usage by End Use										
Completion Year	2021																							
Condition																							
EUL	20.00	20.00	20.00	20.00	20.00	12.00	8.00	6.00	10.00	12.00	10.00		20	20	20	20	20	12	8	6	10	12	10
Hour	Spc Heat	Spc Cool	Indr Fans	Heat Rej	Pump & Misc	Dom HW	Lighting	Recept	Process	Othr Ltg	Proc Mtrs	TOTAL	Spc Heat	Spc Cool	Indr Fans	Heat Rej	Pump & Misc	Dom HW	Lighting	Recept	Process	Othr Ltg	Proc Mtr
1	0	0.007558	1.76046	0	0	0	0.128323	0.147073	0	0	0	26.5979	0.488712	0	1.00611	0	0	0	0.128323	0.147073	0	0	0
2	0	0.006504	2.40434	0	0	0	0.128323	0.147073	0	0	0	28.6436	0.455126	0	1.11517	0	0	0	0.128323	0.147073	0	0	0
3	0	0.004103	2.09984	0	0	0	0.128323	0.147073	0	0	0	29.6455	0.432253	0	0.743446	0	0	0	0.128323	0.147073	0	0	0
4	0	0.000795	1.92545	0	0	0	0.128323	0.147073	0	0	0	29.8487	0.74021	0	1.11517	0	5	0	0.128323	0.147073	0	0	0
5	0	0.003074	2.3808	0	0	0	0.128323	0.147073	0	0	0	33.1686	0.970717	0	1.11517	0	0	0	0.128323	0.147073	0	0	0
6	0	0.002836	2.12555	0	0	0	0.128323	0.147073	0	0	0	48.5857	0.573869	0	0.743446	0	0	0	0.128323	0.147073	0	0	0
7	0	0	1.91506	0	0	0	0.128323	0.147073	0	0	0	37.4006	1.136	0	1.11517	0	0	0	0.128323	0.147073	0	0	0
8	0	0.000497	2.3706	0	0	0	0.128323	0.147073	0	0	0	36.6159	1.29083	0	1.11517	0	0	0	0.128323	0.147073	0	0	0
9	0	0.003605	2.08492	0	0	0	0.128323	0.147073	0	0	0	35.5373	0.62368	0	0.743446	0	0	0	0.128323	0.147073	0	0	0
10	0	0.001812	1.93509	0	0	0	0.128323	0.147073	0	0	0	35.2493	0.436635	0.006139	1.11517	0	0	0	0.128323	0.147073	0	0	0
11	0	0.005019	2.1459	0	0	0	0.128323	0.147073	0	0	0	35.0798	0.040515	0.002776	0.460816	0	0	0	0.128323	0.147073	0	0	0
12	0	0.000674	0.15241	0	0	0	0.128323	0.147073	0	0	0	35.0974	0	0	0	0	0	0	0.128323	0.147073	0	0	0
13	0	0	0	0	0	0	0.128323	0.147073	0	0	0	35.1844	0	0	0	0	0	0	0.128323	0.147073	0	0	0
14	0	0	0	0	0	0	0.128323	0.147073	0	0	0	40.0908	0	0	0	0	0	0	0.128323	0.147073	0	0	0
15	0	0	0	0	0	0	0.128323	0.147073	0	0	0	45.1378	0	0	0	0	0	0	0.128323	0.147073	0	0	0
16	0	0	0	0	0	0	0.128323	0.147073	0	0	0	45.823	0	0	0	0	0	0	0.128323	0.147073	0	0	0
17	0	0	0	0	0	0	0.128323	0.147073	0	0	0	46.9214	0	0	0	0	0	0	0.128323	0.147073	0	0	0
18	0	0	0	0	0	0	0.128323	0.147073	0	0	0	43.8299	0	0	0	0	0	0	0.128323	0.147073	0	0	0
19	0	0	0	0	0	0	0.128323	0.147073	0	0	0	16.9056	0	0	0	0	0	0	0.128323	0.147073	0	0	0
20	0	0	0	0	0	0	0.128323	0.147073	0	0	0	16.9056	0	0	0	0	0	0	0.128323	0.147073	0	0	0

Whole Building Summary
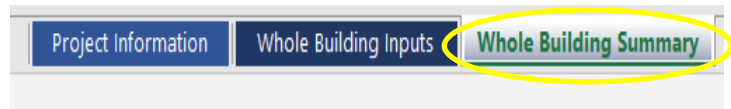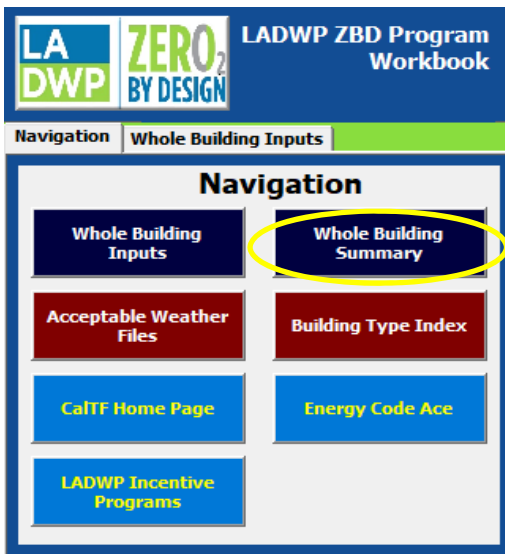
Click the Whole Building Summary button in the Navigation box or the Whole Building Summary tab at the bottom of the page to initiate the Whole Building Summary sheet.

Whole Building Performance (WBP) Summary Sheet

	LADWP ZBD Program Workbook Whole Building Performance Summary V.12.21.2020

Customer Information

Project Name					Completion Year
Sample Project					2021

Project Site Address	City	State	Zip	Climate Zone	Building Type
Sample Address	Los Angeles	CA	90013	9	Education - Secondary School

End Use	Annual kWh Savings	Coincident Peak (kW)	Incentive ($)	$/kWh	EUL
Spc Heat	-2,360.62	-0.01	-$944.25	$0.40	20
Spc Cool	1,946.87	0.02	$778.75	$0.40	20
Indr Fans	7,982.51	1.45	$3,193.00	$0.40	20
Heat Rej	0.00	0.00		$0.40	20
Pump & Misc	0.00	0.00		$0.40	20
Dom HW	0.00	0.00		$0.30	12

Here you will be able to view the estimated energy savings and incentive amount for your project. The savings are broken down by End Use and its Effective Useful Life (EUL).

Any End Use categories indicating negative savings and incentives will be deducted from the project's total energy savings and incentive amount.

Please note this estimate is <u>not guaranteed</u> and may be adjusted based on post-construction verification, and may also be subject to change, if any project-related information is found to be inaccurate, incomplete, or if the project scope changes at any time before the final project review and incentive payment is made by LADWP.