

**Name: Maneth (Lilee) Dethchan-Manibusan**

**Directions on the use of this model:**

This model is designed for anyone who is interested in knowing the cost structure for programs provided to homeless youths. Please note that these are Massachusetts State funded programs run by a third party nonprofit. These programs include Street Outreach, Drop in Center, Transitional Living, Independent Housing, Behavioral Health, Basic Center, and Housing Services. The model breaks down each program's cost elements based on assumptions in the YELLOW cells per program and by location. Numerical assumptions are made in the YELLOW cells for aspects of the programs. The GREEN cells are linked to the assumptions made in YELLOW and will change according to the YELLOW cells.

**Critical Assumptions:**

The critical assumptions for this model are made in YELLOW to demonstrate cost based numerical assumptions for aspects of the programs per year. The GREEN cells are linked to the assumptions made in YELLOW and will change according to the YELLOW cells. Yellow cells represent future assumptions and green cells represent the final calculations per program per location. Numbers will change accordingly when changing the color coded cells. The model focuses on rate of change in factors such as salaries for directors and staff, costs of printed materials and its rate of increase, amount of printed materials, the number of youths per program per year, increase of youths throughout the years, stipend expense, and increase cost of living within regions.

**Results of the model and what they mean (or why they are valuable)**

Based on the assumptions for each program, the cost of providing one program each of Street Outreach, Drop in Center, Transitional Living, Independent Housing, Behavioral Health, Basic Center, and Housing Services to 20 youths per program, the cost for the state is approximately \$2.5M. As these programs are being extended to more locations, the funding received from the state will need to increase as shown in the model. The model breaks down total costs per program per year into 5 years into the future. Additionally, the model accounts for program increases per year and the number of youths increase per year which will need approximately 13M to fund these programs for the targeted homeless youths.

**Recommendations**

As a necessary initiative for aiding homeless youths, the Special Commission should consider ALL aspects of the costs when allocating budgets. These costs include, but are not limited to, printing material, salaries of directors and staff, cost of transportation, etc. It is highly recommended to increase State funding to approximately \$2.5 million to account for program increases and expansion per year. It is important to note that these programs, including Street Outreach, Drop in Center, Transitional Living, Independent Housing, Behavioral Health, Basic Center, and Housing Service, account for 20 youths increase in usage.

**Future contact information:**

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Created By Maneth Dethchan-Manibusan 3/4/2014  
 Use this Model by changing the values in the Yellow cells.  
 Green Cells are Totals per program

Costs Per Programs	2014	2015	2016	2017	2018
Total Cost for Street Outreach	\$ 195,683	\$ 395,599	\$ 599,882	\$ 808,683	\$ 1,022,173
Total Cost of Drop In Center	\$ 239,858	\$ 484,553	\$ 734,160	\$ 988,752	\$ 1,248,406
Total Cost of Transitional Living	\$ 251,058	\$ 497,053	\$ 747,959	\$ 1,003,851	\$ 1,264,803
Total Cost of Independent Housing	\$ 284,016	\$ 573,834	\$ 869,543	\$ 1,171,237	\$ 1,479,009
Total Cost of Beahvorial Health	\$ 457,714	\$ 924,583	\$ 1,400,747	\$ 1,886,345	\$ 2,381,517
Total Cost of Basic Center	\$ 974,168	\$ 1,967,819	\$ 2,981,246	\$ 4,014,745	\$ 5,068,616
Total Cost of Housing Services	\$ 115,582	\$ 233,476	\$ 353,716	\$ 476,337	\$ 601,375
<b>TOTAL COST</b>	<b>\$ 2,518,079</b>	<b>\$ 5,076,917</b>	<b>\$ 7,687,253</b>	<b>\$ 10,349,950</b>	<b>\$ 13,065,899</b>

**Assumptions**

Street Outreach	2014	2015	2016	2017	2018
Number of programs and location	1	2	3	4	5
Increase number of programs	1	1	1	1	1
Number of youths per program	20	23	26	30	35
Increase in youths		15%	15%	15%	15%
Number of Directors	1	1	1	1	1
Number of staffs	2	2	2	2	2
Salary per director per hour	\$ 30	\$ 30	\$ 31	\$ 31	\$ 31
Increase in salary for director		1%	1%	1%	1%
Hours worked per day	8	8	8	8	8
Number of days per year	5	5	5	5	5
Number of weeks per year	52	52	52	52	52
Salary per staff per hour	\$ 20	\$ 20	\$ 20	\$ 21	\$ 21
Increase in salary for staff		1%	1%	1%	1%
Hours worked per day	8	8	8	8	8
Number of days per year	5	5	5	5	5
Number of weeks per year	52	52	52	52	52
Payroll taxes	10%	10%	10%	10%	10%
Fringe Benefits	18%	18%	18%	18%	18%
Training cost per staff	\$ 250	\$ 275	\$ 303	\$ 333	\$ 366
Increase in training cost		10%	10%	10%	10%
Number of printed material	5000	5000	5000	5000	5000
Cost per printed Material	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2
Increase in cost per printed Material		1%	1%	1%	1%
Cost of bus pass	\$ 79	\$ 80	\$ 81	\$ 81	\$ 82
Increase cost of bus pass		1%	1%	1%	1%
Percentage of youths needing bus passes	50%	50%	50%	50%	50%
Average Miles Traveled per year	150	150	150	150	150
Cost per miles	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4
Increase in gas prices per		1%	1%	1%	1%

Cost per Program	2014	2015	2016	2017	2018
Director's Salary	\$ 79,872	\$ 161,341	\$ 244,432	\$ 329,169	\$ 415,576
Staff's Salary	\$ 106,496	\$ 215,122	\$ 325,910	\$ 438,892	\$ 554,101
Training Expense	\$ 500	\$ 1,100	\$ 1,815	\$ 2,662	\$ 3,660
Printed Materials Expense	\$ 7,500	\$ 15,150	\$ 22,952	\$ 30,909	\$ 39,023
Bus Pass Expense	\$ 790	\$ 1,835	\$ 3,197	\$ 4,952	\$ 7,189
Travel Expense	\$ 525	\$ 1,050	\$ 1,575	\$ 2,100	\$ 2,625
<b>Total Cost for Street Outreach</b>	<b>\$ 195,683</b>	<b>\$ 395,599</b>	<b>\$ 599,882</b>	<b>\$ 808,683</b>	<b>\$ 1,022,173</b>

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<b>TOTAL COST</b>	<b>\$ 2,518,079</b>	<b>\$ 5,076,917</b>	<b>\$ 7,687,253</b>	<b>\$ 9,875,262</b>	<b>\$ 13,065,899</b>

Housing Services	2014	2015	2016	2017	2018
Number of programs and location	1	2	3	4	5
Increase number of programs		1	1	1	1
Number of youths per program	20	20	20	21	21
Increase in youths		1%	1%	1%	1%
Number of Directors	1	1	1	1	1
Number of staffs	2	2	2	2	2
Salary per director	\$ 30	\$ 30	\$ 31	\$ 31	\$ 31
Increase in salary for director		1%	1%	1%	1%
Hours worked per day	8	8	8	8	8
Number of days per year	5	5	5	5	5
Number of weeks per year	52	52	52	52	52
Salary per staff	\$ 20	\$ 20	\$ 20	\$ 21	\$ 21
Increase in salary for staff		1%	1%	1%	1%
Hours worked per day	8	8	8	8	8
Number of days per year	5	5	5	5	5
Number of weeks per year	52	52	52	52	52
Payroll taxes	10%	10%	10%	10%	10%
Fringe Benefits	18%	18%	18%	18%	18%
Training cost per staff	\$ 200	\$ 202	\$ 204	\$ 206	\$ 208
Increase training cost per staff		1%	1%	1%	1%
Number of per diem worker	1	1	1	1	1
Per Diem Rate	\$ 270	\$ 273	\$ 275	\$ 278	\$ 281
Increase of salary for per diem		1%	1%	1%	1%
Cost per printed Material	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2
Increase cost per printed material		1%	1%	1%	1%
Number of printed material	5,000	5,000	5,000	5,000	5,000
Average Miles Traveled per year	100	100	100	100	100
Cost per miles	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4
Increase in gas prices per		1%	1%	1%	1%

Cost per Program	2014	2015	2016	2017	2018
Director's Salary	\$ 44,928	\$ 90,755	\$ 137,493	\$ 185,157	\$ 233,761
Staff's Salary	\$ 59,904	\$ 121,006	\$ 183,324	\$ 246,877	\$ 311,682
Training Expense	\$ 400	\$ 808	\$ 1,224	\$ 1,648	\$ 2,081
Printed Materials Expense	\$ 10,000	\$ 20,200	\$ 30,603	\$ 41,212	\$ 52,030
Travel Expense	\$ 350	\$ 707	\$ 1,071	\$ 1,442	\$ 1,821
Temporary Per Diem Expense	\$ 270	\$ 545	\$ 826	\$ 1,113	\$ 1,405
<b>Total Cost of Housing Services</b>	<b>\$ 115,582</b>	<b>\$ 233,476</b>	<b>\$ 353,716</b>	<b>\$ 476,337</b>	<b>\$ 601,375</b>

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Drop in center	2014	2015	2016	2017	2018
Number of programs and location	1	2	3	4	5
Increase number of programs		1	1	1	1
Number of youths per program	20	20	20	21	21
Increase in youths		1%	1%	1%	1%
Number of Directors	1	1	1	1	1
Number of staffs	2	2	2	2	2
Salary per director per hour	\$ 30	\$ 30	\$ 31	\$ 31	\$ 31
Increase in salary for director		1%	1%	1%	1%
Hours worked per day	8	8	8	8	8
Number of days per year	5	5	5	5	5
Number of weeks per year	52	52	52	52	52
Salary per staff	\$ 20	\$ 20	\$ 20	\$ 21	\$ 21
Increase in salary for staff		1%	1%	1%	1%
Hours worked per day	8	8	8	8	8
Number of days per year	5	5	5	5	5
Number of weeks per year	52	52	52	52	52
Payroll taxes	10%	10%	10%	10%	10%
Fringe Benefits	18%	18%	18%	18%	18%
Training cost per staff	\$ 200	\$ 202	\$ 204	\$ 206	\$ 208
Increase in training cost		1%	1%	1%	1%
Cost of bus pass	\$ 79	\$ 80	\$ 81	\$ 81	\$ 82
Increase cost of bus pass		1%	1%	1%	1%
Percentage of youths needing bus passes	50%	50%	50%	50%	50%
Number of Buildings	2	2	2	2	2
Average cost per building	\$ 7,000	\$ 7,070	\$ 7,141	\$ 7,212	\$ 7,284
Increase cost of building		1%	1%	1%	1%
Average cleaning expense per building	\$ 3,000	\$ 3,030	\$ 3,060	\$ 3,091	\$ 3,122
Rate increase for cleaning expense		1%	1%	1%	1%
Average insurance premium per building	\$ 5,000	\$ 5,050	\$ 5,101	\$ 5,152	\$ 5,203
Rate increase for insurance premium		1%	1%	1%	1%
Contingency Repairs per building	\$ 3,800	\$ 3,838	\$ 3,876	\$ 3,915	\$ 3,954
Increase cost repairs		1%	1%	1%	1%
Cost of office supplies	\$ 3,000	\$ 3,030	\$ 3,060	\$ 3,091	\$ 3,122
Increase cost of office supplies		1%	1%	1%	1%
Cost of food per youth	\$ 60	\$ 61	\$ 61	\$ 62	\$ 62
Increase cost of food		1%	1%	1%	1%
Cost per printed Material	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2
Increase cost per printed material		1%	1%	1%	1%
Number of printed material	5,000	5,000	5,000	5,000	5,000

Cost per Program	2014	2015	2016	2017	2018
Director's Salary	\$ 79,872	\$ 161,341	\$ 244,432	\$ 329,169	\$ 415,576
Staff's Salary	\$ 106,496	\$ 215,122	\$ 325,910	\$ 438,892	\$ 554,101
Training Expense	\$ 400	\$ 808	\$ 1,224	\$ 1,648	\$ 2,081
Bus Expense	\$ 790	\$ 1,612	\$ 2,466	\$ 3,354	\$ 4,277
Rent Expense	\$ 14,000	\$ 28,280	\$ 42,844	\$ 57,697	\$ 72,842
Cleaning Expense	\$ 6,000	\$ 12,120	\$ 18,362	\$ 24,727	\$ 31,218
Repairs Expense	\$ 7,600	\$ 15,352	\$ 23,258	\$ 31,321	\$ 39,543
Insurance Expense	\$ 10,000	\$ 20,200	\$ 30,603	\$ 41,212	\$ 52,030
Cost of Food	\$ 1,200	\$ 2,448	\$ 3,746	\$ 5,095	\$ 6,497
Office Supplies	\$ 6,000	\$ 12,120	\$ 18,362	\$ 24,727	\$ 31,218
Printed Material Expense	\$ 7,500	\$ 15,150	\$ 22,952	\$ 30,909	\$ 39,023
<b>Total Cost of Drop In Center</b>	<b>\$ 239,858</b>	<b>\$ 484,553</b>	<b>\$ 734,160</b>	<b>\$ 988,752</b>	<b>\$ 1,248,406</b>