



Land Use Assumptions, IIP and Development Fees

Town of Florence, AZ



40-year consulting practice serving local government nationwide

- Impact fees/infrastructure financing strategies
- Fiscal/economic impact analyses
- Capital improvement planning
- Infrastructure finance/revenue enhancement
- Real estate and market feasibility

Apache Junction	Maricopa
Avondale	Nogales
Buckeye	Payson
Camp Verde	Pinetop-Lakeside
Casa Grande	Queen Creek
Coolidge	Safford
Dewey-Humboldt	Sedona
Eloy	Sierra Vista
Flagstaff	Surprise
Florence	Tucson
Gilbert	Yuma
Glendale	
Goodyear	

■ Three integrated products

- » Land Use Assumptions (at least 10 years and approved by elected officials)
- » Infrastructure Improvements Plan (IIP) limited to 10 years (no build out analysis)
- » Development Fees part of broader revenue strategy

■ Based on same Level-of-Service (LOS) provided to existing development

■ Limitations on Necessary Public Services

- » 3,000 square feet recreational facilities
- » No regional training facilities for public safety

■ Refunds can be requested if improvements are not built

- One-time payment for growth-related infrastructure, usually collected at the time buildings permits are issued
- Can't be used for operations, maintenance, or replacement
- Not a tax but more like a contractual arrangement to build infrastructure, with three requirements
 - » Need (system improvements, not project-level improvements)
 - » Benefit
 - Short range expenditures
 - Geographic service areas and/or benefit districts
- Proportionate

Summary of LUA

■ Population increase

- » Year round: 3,331
- » Seasonal: 1,101

■ Housing unit increase

- » Single family: 1,750 units
- » Multifamily: 250 units

■ Nonresidential development increase

- » 3,719 jobs
- » 1.3 million square feet

Parks and Recreation



- Consumption-based approach
- Townwide service area
- Components
 - » Park and open space land
 - » Park improvements

Projected Demand (IIP)

Type of Infrastructure	Level of Service		Demand Unit	Average Cost
Land	Residential	0.0083	Acres	per Person
	Nonresidential	0.0007		per Job
Improvements	Residential	0.060	Units	per Person
	Nonresidential	0.005		per Job

Need for Park Infrastructure					
	Year	Peak HH Population	Jobs	Acres	Improvements
Base	2018	14,480	7,626	125	909
Year 1	2019	14,926	7,902	128	937
Year 2	2020	15,369	8,188	132	965
Year 3	2021	15,812	8,484	136	993
Year 4	2022	16,255	8,791	140	1,022
Year 5	2023	16,698	9,172	144	1,050
Year 6	2024	17,141	9,571	148	1,079
Year 7	2025	17,584	9,987	152	1,107
Year 8	2026	18,027	10,420	156	1,136
Year 9	2027	18,470	10,873	160	1,165
Year 10	2028	18,913	11,345	164	1,194
Ten-Yr Increase		4,433	3,719	39	285
			Growth-Related Expenditures =>	\$390,208	\$3,817,598

Total Growth-Related Expenditures	\$4,207,806
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Proposed Development Fee

<i>Fee Component</i>	<i>Cost per Person</i>	<i>Cost per Job</i>
Park Land	\$82.55	\$6.53
Park Improvements	\$807.65	\$63.90
Development Fee Study	\$7.19	\$0.43
TOTAL	\$897.39	\$70.86

Residential (per unit)

<i>Development Type</i>	<i>Persons per Household</i>	<i>Proposed Fees</i>	<i>Current Fee</i>	<i>Increase / Decrease</i>
Single-Family	2.42	\$2,175	\$1,417	\$758
Multifamily	1.80	\$1,616	\$1,148	\$468

*Figure A1.

Nonresidential (per square foot)

<i>Development Type</i>	<i>Jobs per 1,000 Sq. Ft.</i>	<i>Proposed Fees</i>	<i>Current Fee</i>	<i>Increase / Decrease</i>
Commercial/Retail	2.34	\$0.17	\$0.17	(\$0.00)
Office/Institutional	2.97	\$0.21	\$0.20	\$0.01
Industrial/Flex	1.63	\$0.12	\$0.13	(\$0.01)

Flre

The image features a minimalist design with a dark blue upper portion and a teal lower portion. A thick white curved line separates the two colors, starting from the bottom left and curving towards the top right. The word "Flre" is printed in white in the top left corner.

- Consumption-based approach
- Townwide service area
- Credit for existing debt
- Components
 - » Station square footage
 - » Apparatus

Projected Demand

Type of Infrastructure	Level of Service		Demand Unit	Average Cost
Facilities	Residential	1.21	Square Feet	per Person
	Nonresidential	0.89		per Job
Vehicles	Residential	0.0005	Vehicles	per Person
	Nonresidential	0.0004		per Job

\$292 per SF

\$459,583 per Vehicle

Need for Fire Infrastructure					
	Year	Peak HH Population	Jobs	Facilities (SF)	Vehicles
Base	2018	14,480	7,626	24,300	11
Year 1	2019	14,926	7,902	25,085	11
Year 2	2020	15,369	8,188	25,875	12
Year 3	2021	15,812	8,484	26,675	12
Year 4	2022	16,255	8,791	27,484	12
Year 5	2023	16,698	9,172	28,359	13
Year 6	2024	17,141	9,571	29,250	13
Year 7	2025	17,584	9,987	30,156	14
Year 8	2026	18,027	10,420	31,078	14
Year 9	2027	18,470	10,873	32,017	14
Year 10	2028	18,913	11,345	32,974	15
<i>Ten-Yr Increase</i>		4,433	3,719	8,674	4
Growth-Related Expenditures =>				\$2,529,907	\$1,804,548

Total Growth-Related Expenditures	\$4,334,455
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Proposed Development Fee

<i>Fee Component</i>	<i>Cost per Person</i>	<i>Cost per Job</i>
Fire Facilities	\$248.90	\$183.80
Fire Vehicles	\$251.37	\$185.62
Development Fee Study	\$5.84	\$2.36
Credit	(\$106.72)	(\$71.09)
TOTAL	\$399.39	\$300.68

Residential (per unit)

<i>Development Type</i>	<i>Persons per Household</i>	<i>Proposed Fees</i>	<i>Current Fee</i>	<i>Increase / Decrease</i>
Single-Family	2.42	\$968	\$917	\$51
Multifamily	1.80	\$719	\$743	(\$24)

*Figure A1.

Nonresidential (per square foot)

<i>Development Type</i>	<i>Jobs per 1,000 Sq. Ft.</i>	<i>Proposed Fees</i>	<i>Current Fee</i>	<i>Increase / Decrease</i>
Commercial/Retail	2.34	\$0.70	\$0.66	\$0.04
Office/Institutional	2.97	\$0.89	\$0.61	\$0.29
Industrial/Flex	1.63	\$0.49	\$0.20	\$0.29

Police

The image consists of a dark blue upper section and a teal lower section, separated by a thick white curved line that starts from the bottom left and arcs towards the top right. The word "Police" is written in white, bold, sans-serif font in the top left corner of the dark blue area.

- Consumption-based approach
- Townwide service area
- Components
 - » Police space
 - » Police vehicles

Projected Demand (IIP)

Type of Infrastructure	Level of Service		Demand Unit	Average Cost
Facilities	Residential	0.70	Square Feet	per Person
	Nonresidential	0.26		per Trip End
Vehicles	Residential	0.0021	Vehicles	per Person
	Nonresidential	0.0008		per Trip End

\$292 per SF

\$47,744 per Vehicle

Need for Police Infrastructure					
	Year	Peak HH Population	Trip Ends	Facilities (SF)	Vehicles
Base	2018	14,480	14,830	14,016	43
Year 1	2019	14,926	15,366	14,469	44
Year 2	2020	15,369	15,922	14,925	46
Year 3	2021	15,812	16,498	15,386	47
Year 4	2022	16,255	17,095	15,852	49
Year 5	2023	16,698	17,837	16,357	50
Year 6	2024	17,141	18,612	16,871	52
Year 7	2025	17,584	19,420	17,394	53
Year 8	2026	18,027	20,264	17,926	55
Year 9	2027	18,470	21,144	18,467	57
Year 10	2028	18,913	22,063	19,019	58
Ten-Yr Increase		4,433	7,233	5,003	15
				\$1,460,893	\$732,825

Total Growth-Related Expenditures \$2,193,718

Proposed Development Fee

<i>Fee Component</i>	<i>Cost per Person</i>	<i>Cost per Vehicle Trip</i>
Police Facilities	\$203.50	\$77.27
Police Vehicles	\$102.08	\$38.76
Development Fee Study	\$5.39	\$1.55
TOTAL	\$310.97	\$117.58

Residential (per unit)

<i>Development Type</i>	<i>Persons per Household</i>	<i>Proposed Fees</i>	<i>Current Fee</i>	<i>Increase / Decrease</i>
Single-Family	2.42	\$754	\$607	\$147
Multifamily	1.80	\$560	\$492	\$68

*Figure A1.

Nonresidential (per square foot)

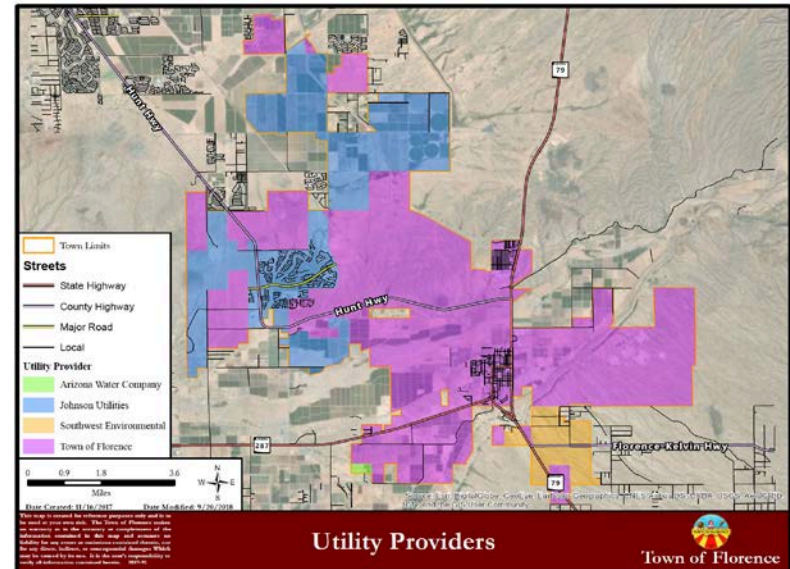
<i>Development Type</i>	<i>Trips per 1,000 Sq. Ft.</i>	<i>Trip Rate Adjustment</i>	<i>Proposed Fees</i>	<i>Current Fee</i>	<i>Increase / Decrease</i>
Commercial/Retail	37.75	33%	\$1.46	\$0.44	\$1.03
Office/Institutional	9.74	50%	\$0.57	\$0.40	\$0.17
Industrial/Flex	4.96	50%	\$0.29	\$0.13	\$0.16

Water

The image features a dark blue background. A thick white curved line starts from the bottom left and arcs towards the top right. Below this line is a large area with a gradient from teal to green. The word "Water" is written in white, bold, sans-serif font in the top left corner.

Methodology and Components

- Plan-based approach
- Florence utility service area
- Components
 - » Transmission
 - » Storage
 - » Supply



Water IIP

Description	FY18-19	FY19-20	FY20-21	FY21-22	FY22-23	Years 6-10	Total Project
Centennial Park Road 8" Loop		\$80,000	\$145,000				\$225,000
Adamsville Rd water line (12 inch)						\$250,000	\$250,000
Water line infrastructure to serve North Florence (16 inch)			\$1,000,000				\$1,000,000
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$1,475,000
Ten-Year Increase in Gallons of Peak Demand per Day =>							1,241,411
Cost per Gallon of Demand =>							\$1.19

Description	FY18-19	FY19-20	FY20-21	FY21-22	FY22-23	Years 6-10	Total Project
North Florence Storage Tank			\$1,250,000				\$1,250,000
Total	\$0	\$0	\$1,250,000	\$0	\$0	\$0	\$1,250,000
Gallons of Capacity per Day =>							1,000,000
Cost per Gallon of Capacity =>							\$1.25

Description	FY18-19	FY19-20	FY20-21	FY21-22	FY22-23	Years 6-10	Total Project
Future Wells (1000 gallons a minute)			\$1,250,000			\$1,500,000	\$2,750,000
Total	\$0	\$0	\$1,250,000	\$0	\$0	\$1,500,000	\$2,750,000
Gallons of Capacity per Day =>							1,440,000
Cost per Gallon of Capacity =>							\$1.91

Proposed Development Fee

<i>Input Variables</i>	<i>Cost per Gallon of Capacity</i>
Transmission Projects	\$1.19
Storage Projects	\$1.25
Supply Projects	\$1.91
Development Fee Study	\$0.03
Capital Cost per Gallon of Capacity =>	\$4.38
Peak Day Gallons of Demand per ERU =>	243

All Development (per meter)

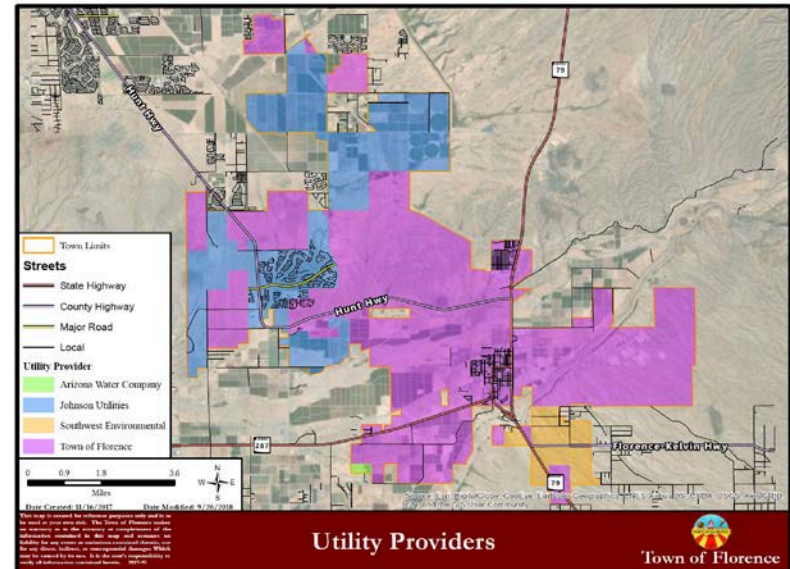
<i>Meter Size (inches)</i>	<i>Meter Type</i>	<i>Capacity Ratio</i>	<i>Proposed Water Fee</i>	<i>Current Fee</i>	<i>\$ Change</i>
0.625	Displacement	1.00	\$1,065	\$1,980	(\$915)
0.75	Displacement	1.50	\$1,597	\$4,950	(\$3,353)
1.00	Displacement	2.50	\$2,662	\$4,950	(\$2,288)
1.50	Displacement	5.00	\$5,324	\$9,900	(\$4,576)
2.00	Displacement	8.00	\$8,519	\$15,840	(\$7,321)
3.00	Compound	16.00	\$17,038	\$31,680	(\$14,642)
3.00	Turbine	17.50	\$18,636	\$34,650	(\$16,014)
4.00	Compound	25.00	\$26,623	\$49,500	(\$22,877)
4.00	Turbine	31.50	\$33,544	\$59,400	(\$25,856)
6.00	Turbine	65.00	\$69,219	\$123,750	(\$54,531)
8.00	Turbine	140.00	\$149,088	\$178,200	(\$29,112)
10.00	Turbine	210.00	\$223,633	\$287,100	(\$63,467)
12.00	Turbine	265.00	\$282,203	\$425,700	(\$143,497)

Wastewater

The image features a dark blue background. A thick white curved line starts from the bottom left and arcs towards the top right. Below this line is a large area with a teal-to-green gradient, which is the largest visual element. The word "Wastewater" is written in white, bold, sans-serif font in the top left corner.

Methodology and Components

- Plan-based approach
- Florence utility service area
- Credit for future debt service
- Components
 - » Collection system
 - » Wastewater treatment



Wastewater IIP

Description	Prior Years	FY18-19	FY19-20	FY20-21	FY21-22	FY22-23	Years 6-10	Total Project
West Main extension Adamsville to Dobson Property (36 inch)							\$600,000	\$600,000
South Sewer Main Extensions 287/SR79 (12 inch)							\$1,000,000	\$1,000,000
Lift Station at Hunt Highway & SR79				\$40,000	\$330,000			\$370,000
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,970,000

Ten-Year Increase in Gallons of Peak Demand per Day => 931,058

Cost per Gallon of Demand => **\$2.12**

Description	Prior Years	FY18-19	FY19-20	FY20-21	FY21-22	FY22-23	Years 6-10	Total Project
Florence S. - WWTP Expansion				\$2,000,000	\$15,150,000			\$17,150,000
South WWTP Expansion Headworks	\$150,000	\$2,000,000	\$1,500,000					\$3,650,000
SWWTP disinfection system upgrade			\$30,000	\$3,000,000				\$3,030,000
S. WWTP odor control / dust abatement			\$300,000					\$300,000
Total	\$150,000	\$2,000,000	\$1,830,000	\$5,000,000	\$15,150,000	\$0	\$0	\$24,130,000

Gallons of Capacity per Day => 1,500,000

Cost per Gallon of Capacity => **\$16.09**

Proposed Development Fee

<i>Input Variables</i>	<i>Cost per Gallon of Capacity</i>
Transmission Projects	\$2.12
Treatment Projects	\$16.09
Principal Payment Credit per Gallon =>	(\$5.04)
Capital Cost per Gallon of Capacity =>	\$13.17
Peak Day Gallons of Demand per ERU =>	182

All Development (per meter)

<i>Meter Size (inches)</i>	<i>Meter Type</i>	<i>Capacity Ratio</i>	<i>Proposed Wastewater Fee</i>	<i>Current Fee</i>	<i>\$ Change</i>
0.625	Displacement	1.00	\$2,400	\$2,140	\$260
0.75	Displacement	1.50	\$3,600	\$2,782	\$818
1.00	Displacement	2.50	\$6,001	\$7,062	(\$1,061)
1.50	Displacement	5.00	\$12,002	\$14,338	(\$2,336)
2.00	Displacement	8.00	\$19,202	\$22,898	(\$3,696)
3.00	Compound	16.00	\$38,405	\$45,852	(\$7,447)
3.00	Turbine	17.50	\$42,005	\$49,862	(\$7,857)
4.00	Compound	25.00	\$60,008	\$71,262	(\$11,254)
4.00	Turbine	31.50	\$75,610	\$85,600	(\$9,990)
6.00	Compound	50.00	\$120,015	\$142,738	(\$22,723)
6.00	Turbine	65.00	\$156,020	\$178,262	(\$22,242)
8.00	Turbine	140.00	\$336,043	\$256,800	\$79,243
10.00	Turbine	210.00	\$504,065	\$413,662	\$90,403
12.00	Turbine	265.00	\$636,082	\$613,538	\$22,544

Transportation



- Hybrid consumption/plan-based approach
- Townwide service area
- Components
 - » Arterial road capacity

Road IIP

<i>Improvement</i>	<i>Segment</i>	<i>New Lanes</i>	<i>Miles</i>	<i>Lane Miles</i>	<i>Func Class</i>	<i>Per lane mile</i>	<i>Project Cost</i>
Florence Heights Drive	SR 79 to SR 79B	2	1	2	Minor Arterial	\$915,000	\$1,830,000
Adamsville Road	3/4 Mile Extension to Plant Road	2	3	6	Principal Arterial	\$1,013,000	\$6,078,000
Butte Avenue	Main to Plant	2	1	2	Major Collector	\$757,000	\$1,514,000
Plant Road	Butte to River	2	0.6	1.2	Minor Arterial	\$915,000	\$1,098,000
Diversion Dam Road	SR79 to Bowling	2	0.5	1	Minor Arterial	\$915,000	\$915,000
Main Street Extension	1st to 79th	2	1	2	Minor Arterial	\$915,000	\$1,830,000
River Road	N/S Corridor to Main	4	1.5	6	Principal Arterial	\$1,013,000	\$6,078,000
Hunt Highway	SR79 to Town Limits	2	4.25	8.5	Principal Arterial	\$1,013,000	\$8,610,500
Hunt Highway	Franklin to Hiller	2	1	2	Principal Arterial	\$1,013,000	\$2,026,000
Attaway Road	Palmer to Hunt	2	1	2	Principal Arterial	\$1,013,000	\$2,026,000
Felix Road	Copper Basin to AZ Farms	2	2	4	Principal Arterial	\$1,013,000	\$4,052,000
Arizona Farms Road	Copper Basin to Hersoth	2	4.5	9	Principal Arterial	\$1,013,000	\$9,117,000
Attaway Road	AZ Farms to Judd	2	2	4	Principal Arterial	\$1,013,000	\$4,052,000
N/S Corridor Alignment	287 to N. Town Limits	4	13	52	Az Parkway	\$1,215,600	\$63,211,200
				101.7		\$1,105,582	\$112,437,700

Source: Town of Florence.

These are potential projects for which to use the development fees. Also used to derive weighted average cost per lane mile for the fee calculation.

Proposed Development Fee

Average Miles per Trip =>	3.82
Cost per Additional Lane Mile =>	\$1,105,582
Planned Lane Miles Needed to Maintain LOS =>	6.10
Ten-Year Growth Cost Funded by Fees	\$6,744,051
VMT Increase Over Ten Years	54,532
Capital Cost per VMT#	\$124.32

Residential (per unit)

Development Type	Avg Wkdy Veh Trip Ends*	Trip Rate Adjustment	Trip Length Adjustment	Proposed Fees	Current Fee	Increase / Decrease
Single-Family Unit	6.20	63%	121%	\$2,250	\$2,086	\$164
Multi-Family Unit	4.30	63%	121%	\$1,560	\$1,313	\$247

Nonresidential (per square foot)

Development Type	Avg Wkdy Veh Trip Ends**	Trip Rate Adjustment	Trip Length Adjustment	Proposed Fees	Current Fee	Increase / Decrease
Commercial/Retail	37.75	33%	66%	\$3.90	\$3.14	\$0.76
Office/Institutional	9.74	50%	73%	\$1.68	\$1.73	(\$0.05)
Industrial/Flex	4.96	50%	73%	\$0.85	\$1.02	(\$0.17)

#Includes cost per VMT of \$0.65 for the development fee study

**Current nonresidential fees adjusted from per 1,000 square feet to per square foot.

Proposed vs. Existing Fees

Residential (per unit)

Type	Police	Fire and Rescue	Parks and Open Space	Roads	Proposed Fee	Current Fee	Difference
Single-Family	\$754	\$955	\$2,175	\$2,250	\$6,133	\$5,027	\$1,106
Multi-Family	\$560	\$710	\$1,616	\$1,560	\$4,446	\$3,696	\$750

Nonresidential (per 1,000 square feet)

Type	Police	Fire and Rescue	Parks and Open Space	Roads	Proposed Fee	Current Fee	Difference
Commercial/Retail	\$1,465	\$694	\$166	\$3,900	\$6,225	\$5,423	\$802
Industrial	\$292	\$482	\$115	\$850	\$1,739	\$464	\$1,275
Office/Other Services	\$292	\$880	\$210	\$1,680	\$3,061	\$2,937	\$124

Meter Size (inches)	Meter Type	Proposed Water Fee	Current Fee	\$ Change	Proposed Wastewater Fee	Current Fee	\$ Change
0.625	Displacement	\$1,065	\$1,980	(\$915)	\$2,400	\$2,140	\$260
0.750	Displacement	\$1,597	\$4,950	(\$3,353)	\$3,600	\$2,782	\$818
1.000	Displacement	\$2,662	\$4,950	(\$2,288)	\$6,001	\$7,062	(\$1,061)
1.500	Displacement	\$5,324	\$9,900	(\$4,576)	\$12,002	\$14,338	(\$2,336)
2.000	Displacement	\$8,518	\$15,840	(\$7,322)	\$19,202	\$22,898	(\$3,696)
3.000	Displacement	\$17,037	\$31,680	(\$14,643)	\$38,405	\$45,582	(\$7,177)
3.000	Compound	\$17,037	\$31,680	(\$14,643)	\$38,405	\$45,852	(\$7,447)
3.000	Turbine	\$18,635	\$34,650	(\$16,015)	\$42,005	\$49,862	(\$7,857)
4.000	Compound	\$26,621	\$49,500	(\$22,879)	\$60,008	\$71,262	(\$11,254)
4.000	Turbine	\$33,543	\$59,400	(\$25,857)	\$75,610	\$85,600	(\$9,990)
6.000	Compound	\$53,243	\$99,000	(\$45,757)	\$120,015	\$142,738	(\$22,723)
6.000	Turbine	\$69,216	\$123,750	(\$54,534)	\$156,020	\$178,262	(\$22,242)
8.000	Compound	\$85,189	\$178,200	(\$93,011)	\$192,025	\$0	\$192,025
8.000	Turbine	\$149,082	\$178,200	(\$29,118)	\$336,043	\$256,800	\$79,243
10.000	Turbine	\$223,623	\$287,100	(\$63,477)	\$504,065	\$413,662	\$90,403
12.000	Turbine	\$282,191	\$425,700	(\$143,509)	\$636,082	\$613,538	\$22,544