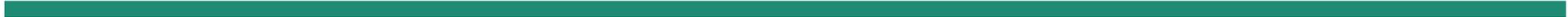


Public Works Assessment Findings & Recommendations



June 2, 2015

Edward Livesay
edward@mosaicstrategicpartners.com
937.609.2348



Outline

- ◆ Goals & Introduction
- ◆ Process Review Highlights & Findings
- ◆ Departmental Findings & Analysis
 - ◆ Vehicle Maintenance
 - ◆ Parks Detail & Recommendations
 - ◆ Road & Bridge Detail & Recommendations
- ◆ Total Project Recommendation Summary
- ◆ Risks & Next Steps

Project Goals

- ◆ Get the parks back in shape after the department was disbanded 5 years ago.
- ◆ Determine how to catch up on street repairs
- ◆ Explore any and all financing and grant options
- ◆ Assess Public Works leadership and strategy, as well as all processes and staffing
- ◆ Create a long term forecast, provide improvement recommendations, and develop a plan that incorporates all of the above

General Observations

- ◆ Immaculate facility
- ◆ Quietly, matter-of-factly get the job done; consistent, low number of complaints
- ◆ Great day-to-day teamwork, give and take
- ◆ Pride in the work; high standards
- ◆ Experienced; knowledgeable
- ◆ Extremely well-organized
- ◆ Safety-conscious
- ◆ Responsive
- ◆ On the move; not a lot of water cooler talk

*The citizens of Miami Township
can be proud of their Public Works department.*

Taking Public Works From Good To Great

Requires:

- ◆ Strategy
- ◆ Leadership
- ◆ Process and systems mindset
- ◆ Teamwork and communication
- ◆ Measuring results
- ◆ Training and coaching

It also requires putting all the pieces together.

Technology – Work Orders

OBSERVATIONS

- 3 systems exist for 4 departments, but not being leveraged to full benefit
 - Bldg Maint – BigFoot (manual log)
 - Veh Maint – Fleet Maint
 - R&B – PubWorks
 - Parks – manual

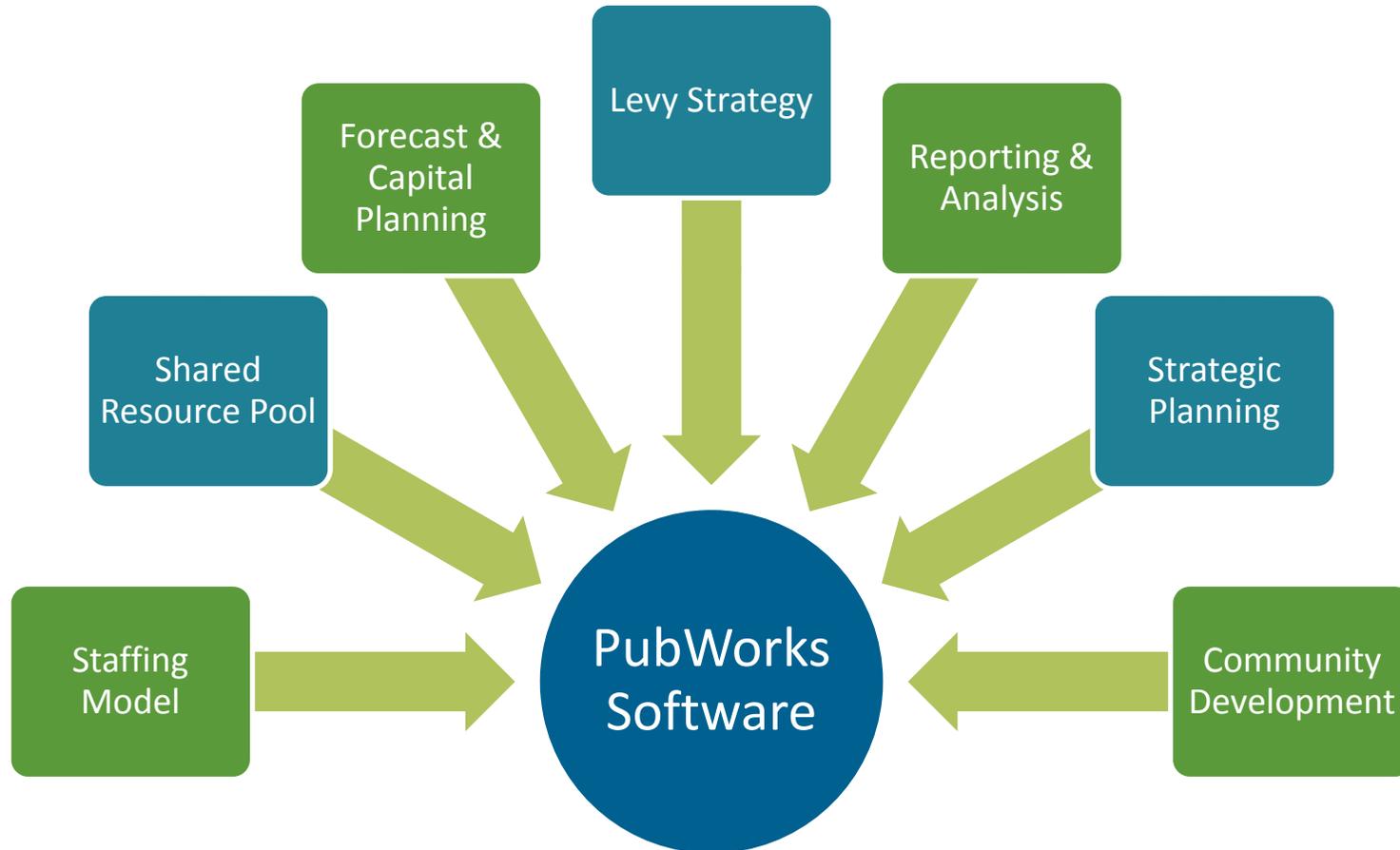
ROOT CAUSES

- Unfamiliarity with a true staffing model
- Habits & expectations
- No assessment or integrated strategic planning

OPPORTUNITIES

- Combine all but Bldg Maintenance (Bigfoot) into PubWorks
- Eliminate manual logs
- Create “one version of the truth”
- Greatly improve management & reporting potential

To reach the next level, all roads lead to PubWorks:



PubWorks builds on current good practices and improves integration.

Vehicle Maintenance Analysis

- ◆ Inventory is lower/tracked better than in the past
- ◆ Parts runs are often batched and combined with test drives
- ◆ Police fleet is turning over and newer vehicles will require less time
- ◆ Have the capacity to take on more without hiring another mechanic, such as:
 - ◆ Mower/equipment maintenance for new Parks District
 - ◆ *Some* fire or other – township-owned leases?
 - ◆ Considerations – priorities & response times, legalities, “marketing,” niche, inventory, scaling

We considered age of park features. . .

Feature/Install Date	Miami View	Crains Run	Waldruhe	Layer	Omietanski	Zengel	Reeder	Chautauqua 8th	Chautauqua 2nd
Shelter 1	1975	1983	1988	1975	2008			1990	
Shelter 2		2003	1988						
Shelter Plumbing	1975	2002	1988	1972					
Drives-Parking	1975	1983	1985	1975	2006				
Play Cube 1	1996	2003	1998	1997	2007	2001	1994	2002	2005
Play Cube 2							1987		
Swing Set	1975		1985	1975					2005
Ball Diamonds	1975			1970					
Tennis Courts	1975			1970					1965
Basketball Court	1975			1970					1994
Drinking Fountain	1975	2002	1988						
Perimeter Fence	2009	1983	1985	1972	1952			1990	
Hiking Trails		1983	1985						

... The capital needs of each park ...

(Miami View shown)

Capital	2016	2017	2018	2019	2020	2021	2022
Shelter 1	\$8,000						
Shelter 2				\$30,000			
Shelter 3							
Shelter Plumbing				\$20,000			
Drives-Parking		\$12,000					
Play Cube 1 (Sand)					\$33,000		
Play Cube 2							\$20,000
Swing Set					\$5,000		
Ball Diamonds, etc.	\$16,500						
Tennis Courts	\$50,000						
Basketball Court		\$20,000					
Drinking Fountain				\$5,000			
Walk Paths (sidewalk)		\$5,000					
Perimeter Fence							
Park ID Signage	\$2,000						
Grills/ Benches/Tables	\$2,000						
Park Lighting		\$10,000					
Pond			\$17,000				

... And in total ...

Capital	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Shelter 1	\$12,000	\$0	\$5,000	\$0	\$45,000	\$0	\$0	\$0	\$0	\$0	\$10,000	\$0
Shelter 2	\$0	\$0	\$5,000	\$30,000	\$0	\$40,000	\$0	\$10,000	\$0	\$0	\$0	\$0
Shelter 3	\$0	\$0	\$0	\$0	\$0	\$0	\$40,000	\$0	\$0	\$0	\$0	\$0
Shelter Plumbing	\$0	\$0	\$0	\$41,000	\$0	\$0	\$0	\$0	\$0	\$5,000	\$0	\$15,000
Drives-Parking	\$0	\$52,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Play Cube 1 (Mulch vs. Sand)	\$0	\$0	\$25,000	\$0	\$33,000	\$55,000	\$0	\$0	\$35,000	\$35,000	\$85,000	\$0
Play Cube 2	\$0	\$0	\$500	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0
Swing Set	\$0	\$0	\$0	\$0	\$5,000	\$10,000	\$0	\$0	\$0	\$0	\$5,000	\$0
Ball Diamonds, etc.	\$22,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Tennis Courts	\$70,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000
Basketball Court	\$0	\$29,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,000
Drinking Fountain	\$0	\$0	\$0	\$15,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Walk Paths (sidewalk)	\$0	\$23,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Perimeter Fence	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,000
Park ID Signage (contracted)	\$16,400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Grills/ Benches/Tables	\$13,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Park Lighting	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70,000
Pond	\$0	\$0	\$23,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

. . . Estimated repairs & restoration . . .

Repairs/Restoration Costs									
		Miami View	Crains Run	Waldruhe	Layer	Omietanski	Zengel	Reeder	Chautauqua 8th
Walk skirts/stair replacement	\$9,000								
Trash Can Lids/Can replacement	\$1,000	\$750	\$875	\$750	\$250	\$500	\$125	\$300	\$300
Play Box Sand Replacement, timbers, grading	\$2,222	\$2,222	\$2,222	\$2,222	\$2,222	\$2,222	\$2,222	\$2,222	\$2,222
Bathroom repairs/painting	\$7,000			\$7,000					
Drainage projects			\$1,200		\$1,200				

Total = \$50,250, to be completed in 2016-17

Tree Program (financials & staffing)

Tree Program Financials	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Mature Tree Cost Retail	\$5,040	\$5,040	\$5,040	\$5,040	\$5,040	\$5,040	\$5,040	\$5,040	\$5,040	\$5,040
Mature Tree Cost Wholesale	\$3,360	\$3,360	\$3,360	\$3,360	\$3,360	\$3,360	\$3,360	\$3,360	\$3,360	\$3,360
Gator Bags	\$240	\$240	\$240	\$240	\$240	\$240	\$240	\$240	\$240	\$240
Mature Tree Mulch	\$630	\$630	\$1,260	\$1,260	\$1,890	\$1,890	\$2,520	\$2,520	\$3,150	\$3,150
Contractor Cost	\$3,840	\$3,840	\$3,840	\$3,840	\$3,840	\$3,840	\$3,840	\$3,840	\$3,840	\$3,840
Total Retail/Contractor Cost	\$9,750	\$9,750	\$10,380	\$10,380	\$11,010	\$11,010	\$11,640	\$11,640	\$12,270	\$12,270
Total Wholesale/In-House Cost	\$4,230	\$4,230	\$4,860	\$4,860	\$5,490	\$5,490	\$6,120	\$6,120	\$6,750	\$6,750

Tree Program Hours	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Obtaining the mature trees	6	6	6	6	6	6	6	6	6	6
Prepping/planting mature trees	72	72	72	72	72	72	72	72	72	72
Mulching mature trees	24	24	48	48	72	72	96	96	120	120
Watering mature trees	6	6	6	6	6	6	6	6	6	6
Total Mature	108	108	132	132	156	156	180	180	204	204
Obtaining the saplings	14	14	14	14	14	14	14	14	14	14
Prepping/planting saplings	2	2	2	2	2	2	2	2	2	2
Total Saplings	16									
Total Tree Program	124	124	148	148	172	172	196	196	220	220

The tree program would also include a 1,000 gallon polymer water tank for watering the mature trees. (\$2,000)

Mowing Equipment Analysis

Purchases & Maintenance

TORO, 10 Year Replacement	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Toro Kubota 72" Diesel Powerplant	\$13,016										\$15,482
Toro Kubota 72" Diesel Powerplant	\$13,016										\$15,482
Toro 60" Diesel	\$12,622										\$15,013
Salvage Value											-\$9,664
New Frontier 12' Flex Wing Grooming Mower	\$19,917										
Turf Tires for Flex wing Mower	\$2,000										
Back Pack Blower	\$400					\$436					\$476
3 Trimmers (Weed Eaters)	\$792					\$864					\$942
Kombi Unit (Trimmer Kit)	\$264					\$288					\$314
2 Handheld Blowers	\$432					\$471					\$514
Stihl Edger Attachment	\$144					\$157					\$171
Push Mower (Toro Super Recycler BSS)	\$585										\$696
Mower Maintenance Cost	\$975	\$1,984	\$2,019	\$2,054	\$2,090	\$1,063	\$2,164	\$2,202	\$2,240	\$2,280	\$1,160
Accessory Maintenance Cost	\$300	\$611	\$621	\$632	\$643	\$327	\$666	\$677	\$689	\$701	\$357
F254 Full Size 4WD Truck, 8 ft bed, tow pkg	\$9,627	\$9,627	\$9,627	\$9,627	\$9,627	\$9,627	\$9,627				
20 FT Commercial Trailer w/Loading Ramp est.	\$2,500										
20 ft Commercial Trailer w/Loading Ramp est.	\$2,500										
	\$79,090	\$12,221	\$12,267	\$12,313	\$12,360	\$13,233	\$12,456	\$2,879	\$2,930	\$2,981	\$40,942

10 year average cost \$16,273

This scenario has slightly higher mower equipment prices, but better longevity and maintenance make it the best value in the long term – much more so than a John Deere lease program.



Mowing Analysis

Parcel	Mowable			Flex Wing			Fuel Breaks Flex Wing		Fuel Breaks Zero Turn		Total		Trash	Total Staff	Total Site
	Acres	% Open	% Trees	Acres/ Hour	Flex Wing Time	Plus Set-Up Clean-up	Acres/ Hour	Zero Turn Time	Plus Set-Up Clean-up	Flex Wing Time	Zero Turn Time	Edging/ Blowing	Hours	Hours	
Miami View	17	70%	30%	5	2.38	0.67	2.74	1.86	0.50	3.05	2.36	1.5	9.91	3.05	
Crains Run	19	40%	60%	5	1.52	0.67	2.74	4.16	0.50	2.19	4.66	2	10.35	2.19	
Waldruhe	15	10%	90%	5	0.30	0.67	2.74	4.93	0.50	0.97	5.43	1.5	9.40	0.97	
Layer	7	50%	50%	5	0.70	0.67	2.74	1.28	0.50	1.37	1.78	1	5.98	1.37	
Omietanski	3.29	20%	80%	5	0.13	0.67	2.74	0.96	0.50	0.80	1.46	1	3.76	0.80	
Zengel	5.5	80%	20%	5	0.88	0.67	2.74	0.40	0.50	1.55	0.90	0.75	3.70	1.55	
Reeder	1.3	90%	10%	5	0.23	0.67	2.74	0.05	0.50	0.90	0.55	0.33	2.28	0.90	
Chautauqua 8	1		100%	5	0.00		2.74	0.36	0.50	0.00	0.86	0.25	1.61	0.00	
Chautauqua 2	0.73		100%	5	0.00		2.74	0.27	0.50	0.00	0.77	0.25	1.02	0.00	
Cottman-Baker	4.5	60%	40%	5	0.54	0.67	2.74	0.66	0.50	1.21	1.16	0.67	3.04	1.21	
Lyons Ridge	2		100%	5	0.00		2.74	0.73	0.24	0.00	0.97	1	2.72	0.00	
Lyons Campus	3		100%	5	0.00		2.74	1.09	0.24	0.00	1.33	2	4.33	0.00	
Lyons Retention	2		100%	5	0.00		2.74	0.73	0.24	0.00	0.97	1	1.97	0.00	
5 mi of bike path	4.78	100%		5	0.96	0.67	2.74	0.00	0.50	1.63	0.50	1.5	3.63	1.63	
PW building (R&B or parks?)	5		100%	5	0.00		2.74	1.82	0.50	0.00	2.32	1.5	4.82	0.00	
Byers Rd	1.8		100%	5	0.00		2.74	0.66	0.50	0.00	1.16	2.5	4.41	0.00	
Frontage	0.33		100%	5	0.00		2.42	0.14	0.50	0.00	0.64	1	2.14	0.00	
Spring Valley	1	90%	10%	5	0.18		2.74	0.04	0.50	0.18	0.54	2	3.47	0.18	
Miami Village medians	0.33		100%				2.90	0.11	0.24	0.00	0.35	0.25	0.60	0.00	
Stroop Road	0.5		100%	5	0.00		2.42	0.21	0.50	0.00	0.71	1	2.04	0.00	
Austin Storage	3	50%	50%	5	0.30	0.67	2.74	0.55	0.50	0.97	1.05	1	3.77	0.97	

Total Staff Hours Per Cycle 85
 *26 cycles 2,826 hours

The Flex Wing mower is expected to save about 5 hours per week and 130 hours per season – easily paying for the price difference of a regular mower.



Staffing Model by Season

Task	Dir	Sr	Jr	Tot Crew	2016 Total	2017 Total
Parks Maintenance - Winter	605	966	285	1,251	1,855	1,855
Winter Repairs & Restoration - 2016 only	8	64	64	128	136	80
Tree Program - Winter Activity		31	31	62	62	62
Winter Capital Activity	263	272	272	544	807	0
TOTAL WINTER	876	1,333	651	1,984	2,860	1,997
Parks Maintenance - Summer	504	187	859	1,046	1,550	1,474
Mowing & Landscaping, etc.	146	1,413	1,413	2,826	2,972	2,972
Summer Repairs & Restoration - 2016 only	173	184	328	512	685	48
Tree Program - Summer Activity		31	31	62	62	62
Summer Capital Activity	247	350	350	701	947	540
TOTAL SUMMER	1,069	2,165	2,981	5,147	6,216	5,095
TOTAL ANNUAL	1,945	3,498	3,633	7,131	9,076	7,092

- * *The hours were front-end loaded, due to “catch-up” activity.*
- * *Average winter hours for ‘16/’17 = 2,430; summer = 5,655.*
- * *Available winter hours = 2,200; summer = 6,200, so the work will have to be balanced by season.*

Staffing Model by Year

Task	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Estimated Winter Maintenance Hours	1,855	1,855	1,855	1,855	1,855	1,855	1,855	1,855	1,855	1,855
Estimated Summer Maintenance Hours										
Parks Maintenance - Summer	1,550	1,474	1,474	1,498	1,474	1,474	1,498	1,474	1,474	1,498
Mowing & Landscaping, etc.	2,972	2,972	2,972	2,972	2,972	2,972	2,972	2,972	2,972	2,972
TOTAL SUMMER	4,522	4,446	4,446	4,470	4,446	4,446	4,470	4,446	4,446	4,470
TOTAL ANNUAL MAINTENANCE	6,377	6,301	6,301	6,325	6,301	6,301	6,325	6,301	6,301	6,325
Repairs & Restoration	821	128	0	0	0	0	0	0	0	0
Tree Program	124	124	148	148	172	172	196	196	220	220
Capital Activity Total	1,754	540	772	520	544	528	168	160	168	192
TOTAL ANNUAL ACTIVITY	9,076	7,092	7,220	6,992	7,016	7,000	6,688	6,656	6,688	6,736

Hours level out over time in total, possibly meaning a reduction in PT hours - or the capacity to add more hours as new development comes to Public Works.

Popular Park Feature Considerations

Additional Features	Miami View	Crains Run	Waldruhe	Layer	Omiotanski	Zengel	Reeder	Chautauqua 8th	Chautauqua 2nd
Frisbee Golf		\$10,000							
Circuit Training	\$12,000			\$9,000					
Dog Park	\$23,814			\$18,000					

Total = \$72,814, to be completed in 2017-18, pending citizen feedback

Parks Summary Forecast

3 Scenarios

Parks Forecast	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Salaries	\$101,694	\$287,057	\$288,492	\$289,935	\$291,384	\$292,841	\$294,305	\$295,777	\$297,256	\$298,742	\$300,236	\$301,737
Maintenance/Fuel	\$60,018	\$20,895	\$15,725	\$16,635	\$21,104	\$18,636	\$17,566	\$22,783	\$19,615	\$19,952	\$23,796	\$19,129
Supplies & expenses	\$27,857	\$28,344	\$28,841	\$29,345	\$29,859	\$30,381	\$30,913	\$31,454	\$32,004	\$32,564	\$33,134	\$33,714
Repairs & Restoration	\$0	\$49,050	\$1,200	\$0	\$0	\$600	\$600	\$600	\$600	\$600	\$600	\$600
Annual Events		\$6,000	\$8,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Capital - Equipment	\$0	\$79,815	\$9,627	\$9,627	\$9,627	\$9,627	\$11,843	\$9,627	\$0	\$0	\$0	\$39,426
Capital - Park Features	\$0	\$158,330	\$118,230	\$63,360	\$90,860	\$88,490	\$110,490	\$66,120	\$16,120	\$41,750	\$46,750	\$102,520
Total	\$189,569	\$629,491	\$470,114	\$418,901	\$452,834	\$450,575	\$475,717	\$436,361	\$375,595	\$403,609	\$414,516	\$507,126
Total "Basics"		\$607,491	\$398,114	\$350,401	\$356,834	\$357,575	\$360,717	\$366,361	\$355,595	\$358,609	\$364,516	\$397,126
Total with additions		\$629,491	\$493,927	\$467,901	\$452,834	\$450,575	\$475,717	\$436,361	\$375,595	\$403,609	\$414,516	\$507,126

The General Fund is not capable of supporting any of these scenarios.

- * Includes 2 new Waldruhe Shelter houses, being paid separately by its Foundation.
- * Includes the cost of the Easter egg hunt, haunted forest, and other prior events.
- * The "basics" total provides only the parking drives, ball diamonds, tennis courts, perimeter fence, signage, grills/benches/tables, and the tree program.
- * "Additions" total includes everything, plus the dog parks, Frisbee golf, & circuit training

Park Grant Considerations

Grant Name	Due Date	Objective	Award	Qualifications	Probability	Contact	Questions/Comments
Lowe's Community Partners Grant	May 29, 2015 (Spring Cycle) August 28, 2015 (Fall Cycle)	Support high need projects i.e. bldg renovations, ground improvements, tech and safety upgrades	Most from 10k to 25k; up to a \$.5m	Municipalities and nonprofits in the general area where there's a Lowes; must show proof of resources		community@lowes.com steve.dolan@store.lowe.com	Lowes could possibly provide volunteer labor; do NOT submit more than 1; Dayton Mall Lowes #203 Steve Dolan; his job
ODNR NatureWorks (Ohio grant)	5/1/2015	Acquisition, development, & rehabilitation of recreational areas	Up to 75% reimbursed	-Local government subdivision -Gov must have control (title or 15 yr lease) of land	\$145k pool for Montgomery County (link has all counties')	Mary Fitch 614-265-6477	What specific activities funded by this grant?
ODNR Land And Water Conservation Fund by ODNR	5/1/2015	Acquisition, development and rehabilitation of recreational areas	50% reimbursement	- Townships, villages, cities, counties, park districts, joint recreation districts, and conservancy districts - Must own the property or have a 25 yr lease w/fed gov or another political subdivision		614-265-6477 Mary Fitch	this link shows past winners, appears that it can be used for playground and construction in parks http://realestate.ohiodnr.gov/portals/realestate/pdfs/grants/LWCF/LWCF-awards-2013.pdf
ODNR Clean Ohio Trails Fund	Ongoing	For land acquisition for a trail, trail development, trailhead facilities, engineering and design	Up to 75% matching funds	-Local governments -park and joint recreation districts -conservancy districts -soil and water conservation districts -non-profit organizations - must be completed within 15 months of signing contract		D'Juan S.M. Hammonds 614-265-6417	How much is award for? What specific activities can grant provide for? Bike paths?

These grants require matching funds or committed resources. Unfortunately, neither is possible right now.

Parks Levy Analysis

	5 yr avg	Millage	\$/100k	10 yr avg	Millage	\$/100k	15 yr avg	Millage	\$/100k
Total	\$484,383	0.879	\$30.77	\$444,771	0.807	\$28.25	\$441,171	0.801	\$28.02
Total "Basics"	\$414,083	0.752	\$26.30	\$379,621	0.689	\$24.11	\$380,071	0.690	\$24.14
Total with additions	\$498,946	0.906	\$31.69	\$452,053	0.820	\$28.71	\$446,025	0.809	\$28.33

The parks budget is front-end loaded for “past due” restoration and capital needs. Average costs per 5-year period differ slightly, impacting the required millage and resident cost per \$100,000 home.

The millage in the first couple of years is not enough to cover the costs. Consider a “loan” from the general fund or slow the pace of improvements.

Recommendation (pending citizen input): permanent levy for .82 mills, with the option of tweaking it up or down, based on inflation and property tax collections.

Parks Messaging

- ◆ The greatest portion of park funding needs is normal maintenance.
 - ◆ Repairs/restoration are minor in comparison
 - ◆ Tree program is even smaller
 - ◆ New items like dog parks or Frisbee golf are also small
- ◆ Lessons learned and analysis have resulted in several improvements from “the way it was”
 - ◆ Doing more work in more parcels for about the same budget and headcount as 5 years ago (apples to apples)

Parks – Next Steps

- ◆ Town hall meetings and/or citizen surveys to refine parks capital features and overall plan.
- ◆ Consider a design consultation
- ◆ Decide millage and duration
- ◆ Place on the ballot in August
- ◆ Create and implement levy communication strategy through November election day
- ◆ Create the parks board and consider how to make it most effective; address vandalism

Road & Bridge

“By the Numbers”

- ◆ About 360 streets maintained
- ◆ About 90 linear miles and 196 lane miles
- ◆ 157 cul-de-sacs
- ◆ 2,331 catch basins

Budgets, headcount, and levies are on the following pages.

Past Operational Initiatives

- ◆ Reduced headcount; utilized part time vs. full time staff;
- ◆ Implemented more aggressive preventive maintenance crack/seal program to preserve streets after asphalt
- ◆ Reduced snow removal expenditures with new techniques
- ◆ Suspended/delayed capital purchases
- ◆ Advanced Fleet Maintenance program and daily care
- ◆ Performing janitorial services and grounds maintenance in-house
- ◆ Relinquished use of company vehicles to reduce wear & tear and save on fuel
- ◆ Lease to own program for equipment, with auction resale
- ◆ Adjusted the schedule for leaf pick-up, roadside mowing, and street-sweeping
- ◆ Secured \$1.5m in OPWC grants for roadway projects
- ◆ Etc.

Current Road & Bridge Fund Financial Constraints

- ◆ Property tax collections have decreased by \$250k+ since '07-'10 levels.
- ◆ Vehicle maintenance has lost over \$100k of internal income from fire district and parks.
- ◆ Street surfacing material costs have doubled (slurry & salt) and tripled (asphalt) over the last 15 years.

GPL Funds

(summary view, only)

GPL funds are used for resurfacing, and are expected to remain consistent. There is no anticipated relief coming from the state for infrastructure needs.

	Budget	Forecast					
	2015	2016	2017	2018	2019	2020	2021
GPL REVENUE							
Gasoline Tax	\$189,000	\$189,000	\$189,000	\$189,000	\$189,000	\$189,000	\$189,000
Permissive Use Tax	\$79,800	\$79,800	\$79,800	\$79,800	\$79,800	\$79,800	\$79,800
License Tax	\$34,200	\$34,200	\$34,200	\$34,200	\$34,200	\$34,200	\$34,200
SUBTOTAL	\$303,000						
Resurfacing Expense	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
NET	\$3,000						
FUND BALANCE	\$288,428						

Road & Bridge Fund

(summary view, only)

R&B funds are predicted to decrease slightly more in the near term, but are expected to recover some by the 2021 triennial revaluation. (Source: County Auditor's office)

R&B REVENUE	Budget	Forecast					
	2015	2016	2017	2018	2019	2020	2021
Property Tax	\$1,430,000	\$1,419,275	\$1,408,630	\$1,408,630	\$1,408,630	\$1,408,630	\$1,450,889
Other misc income	\$336,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
SUBTOTAL	\$1,766,000	\$1,444,275	\$1,433,630	\$1,433,630	\$1,433,630	\$1,433,630	\$1,475,889
Salaries/Benefits	1,112,870	\$1,081,251	\$1,097,470	\$1,113,932	\$1,130,641	\$1,147,600	\$1,164,814
All other expenses	\$609,127	\$576,250	\$686,750	\$707,750	\$617,750	\$617,750	\$617,750
NET	\$44,003	-\$213,226	-\$350,589	-\$388,051	-\$314,760	-\$331,720	-\$306,675
FUND BALANCE	\$2,325,246	\$2,112,019	\$1,761,430	\$1,373,379	\$1,058,618	\$726,898	\$420,223

The change from '15 to '16 is primarily due to a prospective \$250k building sale and \$35k internal transfer from parks in '15. The expense changes are related to capital equipment replacements and debt service payments.

R&B Conditions Rating Methodology

(based on experience & service levels)

		Age (Years)		
Description	2015 Street Rating	Courts + Chautauqua	All Others	Commercial
	Critical	1	25+ yrs	> 20 yrs
Poor	2	21-25	16-20	12-16
Fair	3	15-20	11-15	8-11
Good	4	8-15	6-10	4-7
Excellent	5	0-7	0-5	0-3

Traffic and wear are heaviest with commercial streets and lightest in the courts and Chautauqua streets.

Using asphalt on all streets, except courts and Chautauqua

Timing for 1st slurry treatment: 12-14 years; 2nd treatment 7 years later; then, asphalt.

Current Street Conditions

(using current asphalt prices)

Description	2015 Street Rating*	Lane Miles	Asphalt Cost	% of Tot Miles	% of Tot Cost
Critical	1	23.9	\$1,262,613	12%	11%
Poor	2	49.7	\$2,534,768	25%	22%
Fair	3	62.8	\$3,682,545	32%	33%
Good	4	47.0	\$3,120,593	24%	28%
Excellent	5	12.4	\$708,165	6%	6%
		195.9	\$11,308,684		

* Year end estimate, after current plan streets have been treated.

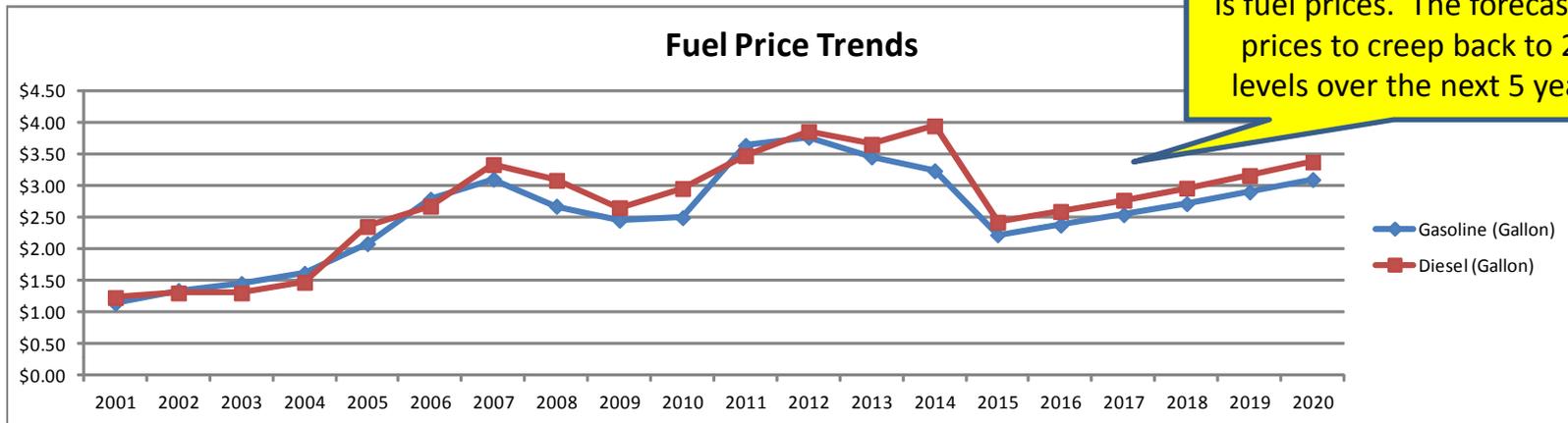
In theory:

Addressing an \$11m resurfacing effort with \$300k/year will take over 35 years.

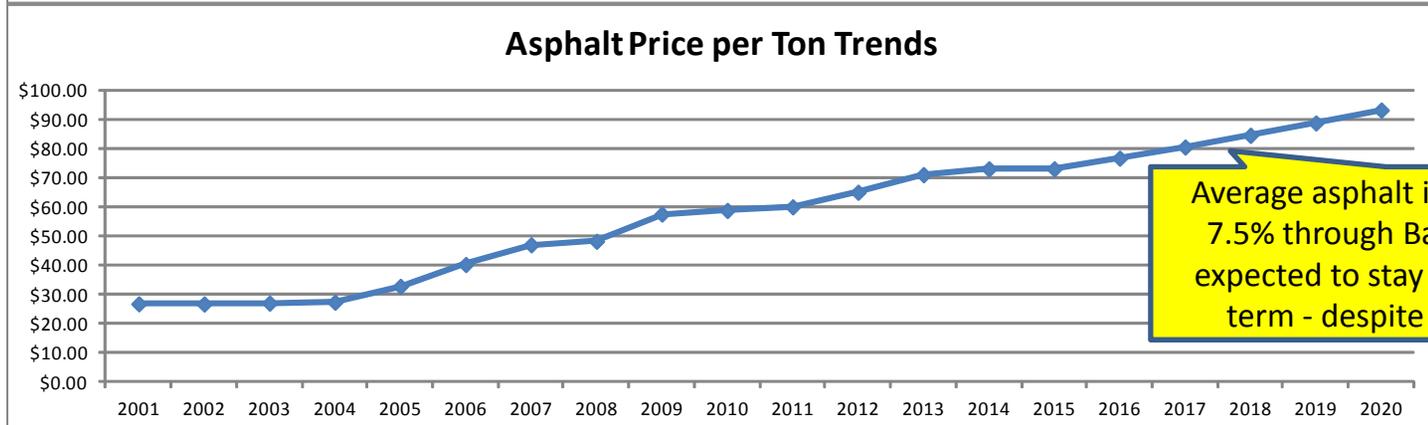
The reality:

When you figure in the rate of asphalt inflation, there is no catching up. Street conditions only get worse.

Rising Material Costs - Asphalt (trend & forecast)



The biggest driver of asphalt cost is fuel prices. The forecast is for prices to creep back to 2014 levels over the next 5 years. *



Average asphalt inflation has been 7.5% through Barrett Paving; it's expected to stay at 5% in the near term - despite the drop in oil.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Gasoline (Gallon)	\$1.14	\$1.34	\$1.45	\$1.61	\$2.08	\$2.78	\$3.10	\$2.67	\$2.45	\$2.49	\$3.63	\$3.76	\$3.45	\$3.23	\$2.22	\$2.37	\$2.54	\$2.71	\$2.90	\$3.09
Diesel (Gallon)	\$1.23	\$1.30	\$1.30	\$1.47	\$2.35	\$2.67	\$3.33	\$3.08	\$2.65	\$2.95	\$3.47	\$3.85	\$3.65	\$3.94	\$2.42	\$2.59	\$2.77	\$2.96	\$3.16	\$3.37
Asphalt (Ton)	\$26.75	\$26.70	\$27.00	\$27.30	\$32.75	\$40.25	\$47.00	\$48.18	\$57.50	\$58.75	60.00	65.00	\$71.00	\$73.00	\$73.00	\$76.65	\$80.48	\$84.51	\$88.73	\$93.17

* Source: World Bank & IMF Commodity Forecasts, Jan/Mar 2015

Financing Strategies

- ◆ Ohio Public Works Commission (OPWC) is the most common (and competitive) grant/loan source.
- ◆ They use a similar rating scale that includes poorer conditions than Miami Township standards.
 - ◆ OPWC ratings are based on grant scoring; township ratings are based on experience and service levels.
 - ◆ OPWC grant opportunities favor streets that are failing, in more economically-challenged communities. This does not apply to the township.
 - ◆ Higher township fund matches increases grant scoring and therefore, the likelihood of receiving a grant.

Resurfacing/Levy Scenarios

(\$000s)

Based on our model, capital need is triggered when a street becomes a "1."

RED = Remaining, resurfacing "balance" of critical ("1") rated street values

BLACK = Positive fund balance amount; all critical streets resurfaced

Need / Scenario:	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026-2030	2031-2035
Capital \$ required/yr	\$1,593	\$462	\$275	\$804	\$550	\$1,785	\$2,114	\$929	\$1,335	\$1,472	\$8,429	\$7,748
Cumulative need	\$1,593	\$2,054	\$2,330	\$3,133	\$3,683	\$5,468	\$7,582	\$8,511	\$9,846	\$11,319	\$19,748	\$27,496

With \$300k/yr GPL:	\$1,293	\$1,454	\$1,430	\$1,933	\$2,183	\$3,668	\$5,482	\$6,111	\$7,146	\$8,319	\$15,248	\$21,496
+ 1 mill (\$851k):	\$742	\$352	\$223	\$271	\$572	\$362	\$1,625	\$1,703	\$2,187	\$2,809	\$8,685	\$13,880
+ 1.5 mill (\$1.127m):	\$466	\$200	\$1,051	\$1,375	\$1,952	\$1,294	\$307	\$505	\$297	\$49	\$2,843	\$4,956
+ 1.75 mill (\$1.264m):	\$329	\$474	\$1,462	\$1,923	\$2,637	\$2,116	\$1,266	\$1,601	\$1,530	\$1,321	\$788	\$2,216
+ 2 mill (\$1.402m):	\$191	\$750	\$1,876	\$2,475	\$3,327	\$2,944	\$2,232	\$2,705	\$2,772	\$2,701	\$1,282	\$544
+ 2.25 mill (\$1.54m):	\$53	\$1,026	\$2,290	\$3,027	\$4,017	\$3,772	\$3,198	\$3,809	\$4,014	\$4,081	\$3,352	\$3,304
+ 2.5 mill (\$1.678m):	\$85	\$1,302	\$2,704	\$3,579	\$4,707	\$4,600	\$4,164	\$4,913	\$5,256	\$5,461	\$5,422	\$6,064

Note:

- * The first year's worth of activity is "front-loaded" from a modeling/catch up standpoint, but would be spread out more in reality.
- * There's no "catching up" in the \$300k GPL fund scenario. Something has to change.
- * The additional 1 mill provides relief for the next 5 years, but isn't enough longer term. Requires a "replacement/additional" levy, which could carry a higher risk of not passing.
- * The 1.5-2 mill strategies provide longer relief and can cover other equipment and infrastructure needs like basins and ramps. If asphalt inflation is lower than forecasted, higher millage builds a balance and may make it easier to pass a "renewal" levy in 5-10 years. Lower inflation and higher balances may warrant more aggressive resurfacing, while "the price is right."

R&B Fund Balance by Scenario

(\$000s)

Considering the associated infrastructure and the annual fund loss requires a higher millage.

Cumulative Resurfacing	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026-2030	2031-2035
+ 1.5 mill (\$1.127m):	\$466	\$200	\$1,051	\$1,375	\$1,952	\$1,294	\$307	\$505	\$297	\$49	\$2,843	\$4,956
+ 1.75 mill (1.264m):	\$329	\$474	\$1,462	\$1,923	\$2,637	\$2,116	\$1,266	\$1,601	\$1,530	\$1,321	\$788	\$2,216
+ 2 mill (\$1.402m):	\$191	\$750	\$1,876	\$2,475	\$3,327	\$2,944	\$2,232	\$2,705	\$2,772	\$2,701	\$1,282	\$544
+ 2.25 mill (\$1.54m):	\$53	\$1,026	\$2,290	\$3,027	\$4,017	\$3,772	\$3,198	\$3,809	\$4,014	\$4,081	\$3,352	\$3,304
+ 2.5 mill (\$1.678m):	\$85	\$1,302	\$2,704	\$3,579	\$4,707	\$4,600	\$4,164	\$4,913	\$5,256	\$5,461	\$5,422	\$6,064

Catch Basins/Ramps	(\$59)	(\$17)	(\$10)	(\$30)	(\$20)	(\$66)	(\$78)	(\$34)	(\$49)	(\$54)	(\$311)	(\$285)
Annual Fund (Net)	(\$213)	(\$351)	(\$388)	(\$315)	(\$332)	(\$307)	(\$307)	(\$307)	(\$307)	(\$307)	(\$1,533)	(\$1,533)

R&B Fund Balance by Millage Scenario:	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026-2030	2031-2035
Fund Balance - 1.5	\$1,501	\$1,499	\$1,652	\$1,331	\$1,256	(\$74)	(\$1,746)	(\$2,189)	(\$3,053)	(\$4,059)	(\$10,197)	(\$15,629)
Fund Balance - 1.75	\$1,638	\$1,773	\$2,063	\$1,879	\$1,941	\$748	(\$787)	(\$1,093)	(\$1,820)	(\$2,689)	(\$8,142)	(\$12,889)
Fund Balance - 2.0	\$1,776	\$2,049	\$2,477	\$2,431	\$2,631	\$1,576	\$179	\$11	(\$578)	(\$1,309)	(\$6,072)	(\$10,129)
Fund Balance - 2.25	\$1,914	\$2,325	\$2,891	\$2,983	\$3,321	\$2,404	\$1,145	\$1,115	\$664	\$71	(\$4,002)	(\$7,369)
Fund Balance - 2.5	\$2,052	\$2,601	\$3,305	\$3,535	\$4,011	\$3,232	\$2,111	\$2,219	\$1,906	\$1,451	(\$1,932)	(\$4,609)

Road & Bridge Funding Recommendations

- ◆ Go beyond understanding the grant scoring criteria to building a relationship with OPWC and MVRPC liaisons
 - ◆ Move from an individual street perspective to a “portfolio” view of all streets, sidewalks, and paths
 - ◆ Solicit the input and guidance from these organizations – especially in combining with other fund sources
- ◆ Partner with Community Development as needed, depending on the fund source
- ◆ Consider spending some R&B reserve dollars now, especially if inflation is lower than expected
- ◆ Decide on a 5 vs. 10 year levy

Levy Analysis

Parks & Streets

	Proposed Millage	Resident Cost/Year for \$100k Home	Resident Cost/Month for \$100k Home	Resident Cost/Year for \$150k Home	Resident Cost/Year for \$200k Home
Parks levy only	0.82	\$28.70	\$2.39	\$43.05	\$57.40
"	0.92	\$32.20	\$2.68	\$48.30	\$64.40
Street levy only	1.5	\$52.50	\$4.38	\$78.75	\$105.00
"	1.75	\$61.25	\$5.10	\$91.88	\$122.50
"	2	\$70.00	\$5.83	\$105.00	\$140.00
"	2.25	\$78.75	\$6.56	\$118.13	\$157.50
Both levies	2.32	\$81.20	\$6.77	\$121.80	\$162.40
"	2.42	\$84.70	\$7.06	\$127.05	\$169.40
"	2.57	\$89.95	\$7.50	\$134.93	\$179.90
"	2.67	\$93.45	\$7.79	\$140.18	\$186.90
"	2.82	\$98.70	\$8.23	\$148.05	\$197.40
"	2.92	\$102.20	\$8.52	\$153.30	\$204.40
"	3.07	\$107.45	\$8.95	\$161.18	\$214.90
"	3.17	\$110.95	\$9.25	\$166.43	\$221.90

The total millage for most township residents is 109.76, (county, schools, library, JVS, township, etc.) so .82-3.17 additional mills equates to a 1-3% increase in property taxes.

Project Recommendations

“Real \$”

AREA	POTENTIAL \$	COMMENTS
7% of Mel's time should be charged to Fire District (Bldg Maintenance)	\$8,400	
Eliminating Fleet Mgmt software w/PubWorks	\$2,250	
Grant options - Streets	\$TBD	MVRPC/OPWC higher match, etc.
Lowe's Grant potential - Parks	\$24,000	Requires documented resources
ODNR Grant	\$TBD	Requires matching funds

5 year savings = \$53,250; MVRPC/OPWC strategy could raise it much higher. Levy passage would yield \$millions and boost citizen satisfaction.

Project Recommendations

Cost Avoidance

AREA	POTENTIAL \$	COMMENTS
Not hiring a Professional Engineer	\$150,000	Training & developing the current director should prevent this hire
Less/shared staff	\$50,000	Gained by sharing resources or increasing "collective capacity" between parks/R&B, leveraging PubWorks, probably as the organization grows
Servicing Crains Run road	\$TBD	Avoid unnecessary or potentially costly "band-aids" by fixing this right and/or getting a Public-Private Partnership.
Public-Private Partnerships to avoid taking on costs and service without corresponding revenue streams	\$xxx,xxx	

5 year savings = \$750,000 - \$millions.

Project Recommendations

Other Investments/Efficiencies

- ◆ Dura-Patcher, mobile patching machine – eliminates the need for cold patch, would save 200+ hours/year. Purchase new for \$30-50k or used; pays for itself over time and frees up resources
- ◆ Ditch Cleaner – negates need for backhoe and grader work, would save 300+ hours/year. Purchase for about \$10k, pays for itself in 2 years, frees up resources
- ◆ Change role call timing to get crews out quicker – 3-400 hours/year.

Leveraging PubWorks and considering all tools, equipment, and the latest trends should yield other future savings opportunities.

Risk Management

Risk	Probability	Impact	Mitigation	Comments
Citizens won't vote for levies until they understand financials for TIFs, JEDDs, Austin Landing	High	High	Transparency; tell the whole story	
Crains Run road costs, without a proper fix and funding	High	High	Discuss with OPWC/MVRPC	
Asphalt inflation is different than expected	Med	High	Monitor the cost index and talk to Barrett at least annually	Dan McAdams 513-460-6616 (S Dayton/Cincy rep)
Going back to the old ways of LT communication	Med	High	Dir, TA, Board must use new tools & insights to hold staff and each other accountable	Utilize Mosaic/Edward for annual review, analysis, forecasting, & planning
Not using PubWorks	Med	High	Dan Mandates; Dan/Adrienne/Greg reinforcement	See above - MAKE it part of the "new conversation"
Police leaves Vehicle Maintenance	Med	High	Township Administrator manages this	
Aging stormwater right-of-way tile network creates additional costs	Med	High	Build reserves and conduct an assessment study of the oldest infrastructure	
Poor parks town hall attendance	Med	Med	Personal invites and extra advertising	Home owners associations, potential board members
Stormwater management costs come to the township without proper accountabilities	Low	High	Stay in sync as a leadership team/board about rules, risks, and ramifications; don't over-commit	
PW Staff doesn't embrace changes; doesn't "believe"	Med	Med	Conduct a separate presentation w/PW LT; provide ongoing training & coaching	
If street levy passes, crack/seal work increases, adding to staffing demand	Med	Med	Incorporate this into the staffing model and adjust accordingly	

Next Steps

- ◆ Board input and modifications
- ◆ Refine forecast estimates and finalize report
- ◆ Refine PubWorks data entry labels for standardization and analysis
- ◆ Clarify and quantify Mosaic's future role to ensure smooth implementation
- ◆ Begin strategic task management adjustments
- ◆ Revisit PubWorks with budget cycle
- ◆ Support levy cycle and continue providing great customer service to citizens