Services owned by Public Health and Emergency Services

- Building Health Partnerships
- Case and Outbreak Management
- Health Advocacy and Promotion
- Health Monitoring and Surveillance
- Health Resource Distribution
- Health Protection Certification
- Individual Health Assessment and Intervention
- Inspections, Investigations and Enforcement
- Emergency Management
- EMS
- 911 Call Taking

The Public Health and Emergency Services (PHES) Department is responsible for the delivery of 11 services for the County, all of which are mandatory and supported substantially by provincial funding. Some of the mandatory services have discretionary elements in how they are delivered which creates opportunities for potential efficiencies.

Service Profiles and Insights

Below is a table of the key information captured in the service profiles for this group of services. In addition, the complete profile contains staff resources, some KPIs, a three year outlook for service pressures and a SWOT Analysis. The complete service profile is available from Information Services.

Public Health and Emergency Services is a somewhat unique combination of services in that both the typical public health services focused on population health management are combined with the first responders and community emergency planning. While all staff are health providers, the focus of the activity is mixed between direct client interventions (Individual Health Assessment and Intervention and EMS) and population level interventions such as Case and Outbreak Management and Inspections and Enforcement. Review of the service profiles indicated that there is some overlap of clients between PHES and Human Services, mainly where clients are low income families and individuals, particularly children.

Recent provincial policy in both public health and poverty reduction has directed public health departments to focus efforts on people "with risk," as the greatest overall population benefit can be obtained from providing targeted support to those groups. Additionally, the continued provincial and federal emphasis on the Social Determinants of Health suggests that when attention is paid to the causes of poverty, some of the poor health behaviours naturally mitigate, such as smoking and substance abuse. In other words, providing better housing, education and community connection opportunities can have a natural impact on obesity and smoking rates, thus improving the population health outcomes that are the focus of this group of services.

The three year outlook for the population health related services suggests that changes in demographics, as well as emerging disease profiles and policy shifts, will have an impact on the capacity and resources to respond. There is some anticipation of additional

expectations being put onto municipalities in relation to the Inspections and Enforcement Service. Oxford County has particular challenges in relation to immunization, and the ability of PHES to creatively work with the community has been seen in its ability to respond to and limit outbreaks. Additionally, the change in focus to the Social Determinants of Health will have an impact on the way the Public Health Advocacy and Promotion and Building Health Partnerships focus efforts on improving population health as the focus moves from changing health behaviours to changing the environmental conditions leading to poor health. The changes in the way Canadian census data is collected and reported will also continue to be a challenge for the population based services in being able to observe and report fluctuations in health outcomes.

For the services directed to individual health interventions, the most significant change is the alteration in provincial policy from universal service delivery to "targeted universality," where "with risk" families are provided more intensive support. The current percentage of families with children that consent to more support is only 52% with a provincial goal of 100%. This change in practice will require both a different philosophy of service and different deployment of resources in the field.

For the Emergency Medical Service, the three year outlook raises concerns about significantly increasing hospital turnaround times and response times, as well as the potential for a provincial mandate of a Community Paramedicine Program that could, if not planned with foresight, add significant cost.

Service Profiles

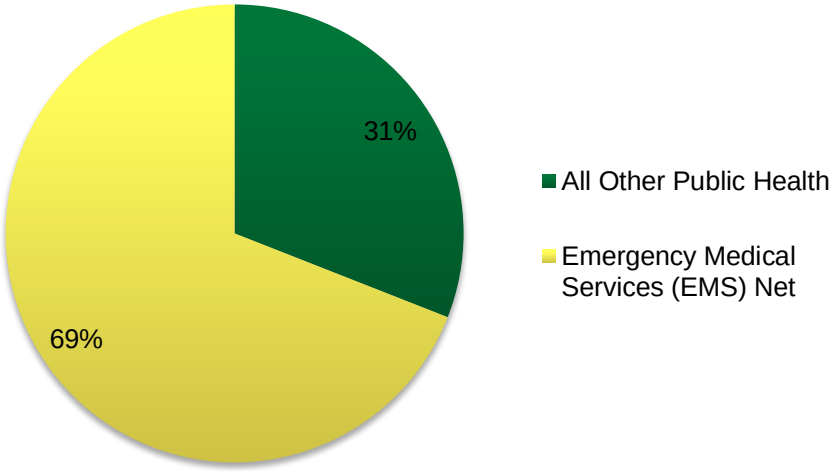
Service	Client	Output	Net $	M/D	County role	Notes
Building Health Partnerships	Community partner	Partnership	$988,277	M/D	Direct	Opportunity to improve outcomes through governance and monitoring

Service	Client	Output	Net $	M/D	County role	Notes
Case and Outbreak Management	Individual or institution exposed to a disease of public importance	Managed case	$131,509	M/M	Direct	Potential to improve service with after-hours service
Health Advocacy and Promotions	Target audience	Campaign	$394,281	M/D	Direct	Opportunity to improve outcomes through governance and monitoring
Health Monitoring and Surveillance	Persons interested in health data	Health Information Report	$487,182	M/M	Direct	
Health Protection Certification	Person requiring certification	Certificate	$1,154	M/D	Direct	
Health Resource Distribution	Health care provider	Resource (vaccine, condoms, etc)	$43,109	M/M	Direct	
Individual Health Assessment and Intervention	Persons eligible for individual care	Care encounter	$657,452	M/D	Direct	Opportunity to improve outcomes by intentional coordination with Human Services
Inspections, Investigation and Enforcement	Owner of inspected premise	Incidence of non-compliance	$344,102	M/M	Direct	Opportunity to improve productivity through process review
Emergency Management	County of Oxford	Emergency Response Plan	$83,937	M/M	Direct	Opportunity to reduce service after all plans developed in 2017

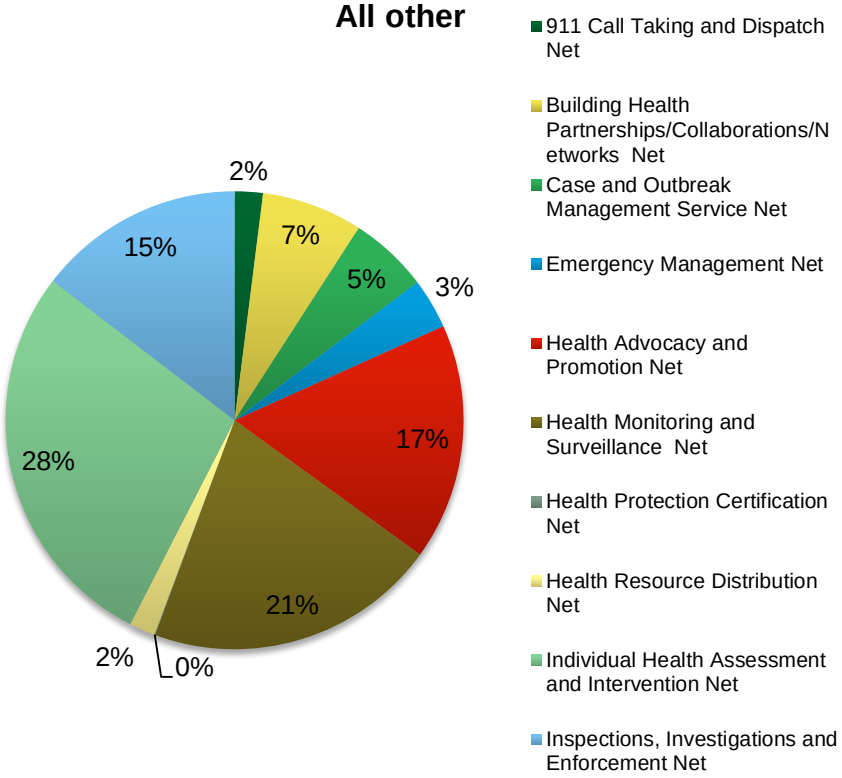
Service	Client	Output	Net $	M/D	County role	Notes
Emergency Medical Service	Ill or injured person	Care and rehabilitation encounter	$5,257,635	M/M	Direct	Opportunity to improve productivity by addressing hospital wait times
911 Call Taking	911 caller	Call taken and dispatched	$48,937	M/M	Contract-ed	Opportunities to review new technology

Service Financial Allocations

Public Health and Emergency Services net



All other



Financial Allocations Insights

The services which show some risk of growth significantly above CPI[5] are the Health Advocacy and Promotion Service, the Health Monitoring and Surveillance Service and the Individual Health Assessment and Intervention Service. While the total dollar increase between the 2011 actuals and the 2017 forecast is small (only $530,000 for the three combined over 6 years), the rate of growth is worthy of note.

Also worthy of note is the growth in the expenses for Emergency Management. While the dollars are lower than the cut-off for this analysis of $100,000, this is a new service. The current delivery model uses contract employees, which is wise given that when all the plans are finally in place, the monitoring activity may not require as many full-time staff.

The largest cost service in this group by a significant margin is the EMS service. Its overall growth in cost from 2011 to the 2017 forecast is less than 3% per year, but that growth represents over $800,000. This service has recently seen revenue reductions in the elimination of the patient transfer service, however that decision was taken to reduce expenses and improve response times.

[5] Consumer Price Index. This was chosen because it roughly reflects the expectation of the public for growth in expenses, including public services.

Yellow highlighting indicates where a service has had both a net growth or decline of greater than 5% per year and an absolute growth or decline of greater than $100,000.

Mandatory, discretionary or traditional	Service name	2011A	2014B	2017F	Average annual growth Rate	Absolute change
M/M	911 Call Taking and Dispatch Expenses	$28,285.00	$46,937.00	$51,350.00	13.59%	$23,065.00
M/M	911 Call Taking and Dispatch Revenue	$0.00	$0.00	$0.00		$0.00
M/M	**911 Call Taking and Dispatch Net**	**$28,285.00**	**$46,937.00**	**$51,350.00**	**13.59%**	**$23,065.00**
M/D	Building Health Partnerships/Collaborations/Networks Expenses	$679,889.37	$843,077.05	$754,140.88	1.82%	$74,251.51
M/D	Building Health Partnerships/Collaborations/Networks Revenues	-$536,082.91	-$674,667.92	-$572,982.20	-1.15%	-$36,899.29
M/D	**Building Health Partnerships/Collaborations/NetworksNet**	**$143,806.46**	**$168,409.13**	**$181,158.68**	**4.33%**	**$37,352.22**
M/M	Case and Outbreak Management Service Expenses	$528,054.05	$615,188.09	$640,451.55	3.55%	$112,397.50
M/M	Case and Outbreak Management Service Revenues	-$416,038.32	-$483,679.02	-$498,782.12	-3.31%	-$82,743.80
M/M	**Case and Outbreak Management Service Net**	**$112,015.73**	**$131,509.07**	**$141,669.43**	**4.41%**	**$29,653.70**
M/M	Emergency Management Expenses	$143,780.26	$214,990.38	$225,474.56	9.47%	$81,694.30
M/M	Emergency Management Revenues	-$77,582.16	-$131,053.70	-$136,977.30	-12.76%	-$59,395.14
M/M	**Emergency Management Net**	**$66,198.10**	**$83,936.68**	**$88,497.26**	**5.61%**	**$22,299.16**
M/M	Emergency Medical Services (EMS) Expenses	$9,741,093.07	$10,438,857.15	$10,845,684.88	1.89%	$1,104,591.81
M/M	Emergency Medical Services (EMS) Revenues	-$4,991,746.00	-$5,181,222.00	-$5,268,975.00	-0.93%	-$277,229.00
M/M	**Emergency Medical Services (EMS) Net**	**$4,749,347.07**	**$5,257,635.15**	**$5,576,709.88**	**2.90%**	**$827,362.81**
M/D	Health Advocacy and Promotion Expenses	$1,853,176.98	$2,036,282.85	$2,004,260.09	1.36%	$151,083.11
M/D	Health Advocacy and Promotion Revenues	-$1,559,565.29	-$1,642,001.77	-$1,582,611.32	-0.25%	-$23,046.03
M/D	**Health Advocacy and Promotion Net**	**$293,611.69**	**$394,281.08**	**$421,648.77**	**7.27%**	**$128,037.08**

Mandatory, discretionary or traditional	Service name	2011A	2014B	2017F	Average annual growth Rate	Absolute change
M/M	Health Monitoring and Surveillance Expenses	$1,890,101.46	$2,100,034.36	$2,130,358.88	2.12%	$240,257.42
M/M	Health Monitoring and Surveillance Revenues	-$1,560,847.01	-$1,612,852.48	-$1,613,786.92	-0.57%	-$52,939.91
M/D	**Health Monitoring and Surveillance Net**	**$329,254.45**	**$487,181.88**	**$516,571.96**	**9.48%**	**$187,317.51**
M/D	Health Protection Certification Expenses	$25,120.25	$19,752.37	$20,293.34	-3.20%	-$4,826.91
M/D	Health Protection Certification Revenues	-$25,189.52	-$18,597.54	-$19,062.41	4.05%	$6,127.11
M/D	**Health Protection Certification Net**	**-$69.27**	**$1,154.83**	**$1,230.93**	**312.83%**	**$1,300.20**
M/D	Health Resource Distribution Expenses	$108,355.57	$122,714.96	$129,215.75	3.21%	$20,860.18
M/D	Health Resource Distribution Revenues	-$85,932.15	-$79,606.42	-$82,008.81	0.76%	$3,923.34
M/D	**Health Resource Distribution Net**	**$22,423.42**	**$43,108.54**	**$47,206.94**	**18.42%**	**$24,783.52**
M/D	Individual Health Assessment and Intervention Expenses	$2,393,757.12	$2,815,276.98	$2,767,229.52	2.60%	$373,472.40
M/D	Individual Health Assessment and Intervention Revenues	-$1,905,441.49	-$2,157,824.50	-$2,063,503.25	-1.38%	-$158,061.76
M/D	**Individual Health Assessment and Intervention Net**	**$488,315.63**	**$657,452.48**	**$703,726.27**	**7.35%**	**$215,410.64**
M/M	Inspections, Investigations and Enforcement Expenses	$1,297,643.38	$1,263,039.68	$1,321,859.07	0.31%	$24,215.69
M/M	Inspections, Investigations and Enforcement Revenues	-$965,674.15	-$918,937.65	-$951,142.67	0.25%	$14,531.48
M/M	**Inspections, Investigations and Enforcement Net**	**$331,969.23**	**$344,102.03**	**$370,716.40**	**1.95%**	**$38,747.17**

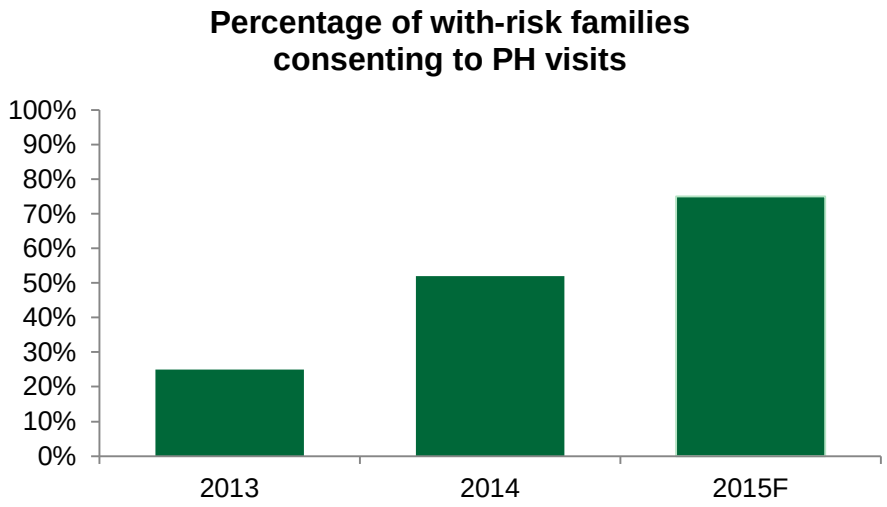
Results Based Accountability™ Performance Indicators

The KPIs for all services can be found in Appendix C.

Individual Health Assessment and Intervention KPI Insights

Individual Health Assessment and Intervention includes several specifically funded sub-services: Healthy Baby Healthy Children; Children in Need of Treatment (dental); Healthy Smiles (dental); Immunization of School Children; Sexual Health and Needle Exchange. The overall goal of this service is to provide specific client interventions that target populations "with risk" to improve their individual health outcomes and the overall population health of the community. The immunization and sexual health services are still provided as universal services, while the other are moving to targeted universality.

Of note, the change in 2012 to target the Healthy Baby, Healthy Children sub-service to families "with risk" has been a challenge for the County. The challenge arises both from obtaining consent from families and providing the more intensive level of service necessary for this client type. The rates of families providing consent to be visited have grown but are not as high as the provincial mandate. Public Health reports that this has been a challenge for the nurses. In addition to having more families consent to be visited, business practices within this service have also hampered productivity. Due to a number of factors, including use of a provincial database for record management, staff who visit families on the road are required to attend at Woodstock headquarters to pick up paper medical files, carry them in secure bags, and return them to Woodstock at the end of the work day. This results in both a substantial loss in productive time taken up by travelling and a data insecurity risk if paper files are lost. Using the staff who work around Tillsonburg as an example, the loss in productive time is one hour per day multiplied by three staff. Extended to the other staff engaged in this work, the loss of productivity is significant.



There are three SIOs recommended that specifically respond to this need: Transformation to Full Integration of Services Supporting Families, Children and Singles; Public Health Inspectors and Nurses Scheduling, Process and Decentralization Strategy and After Hours Services.

The integration of the Individual Health Assessment and Intervention Services with Financial Assistance, Shelter and Child Care Subsidy support the philosophies of "no wrong door" and "wraparound services" for vulnerable clients. Using linked caseloads, colocation and case conferencing, the public health nurses and client support workers will be able to address the needs of the client and support each other in enabling more with-risk families to access available services. The intentional cooperation of Public Health services and Financial Assistance services is not unknown in Ontario. It is a recommended strategy flowing from the Ontario Poverty Reduction Strategy and is contemplated in the Ontario Public Health Standards for the Healthy Babies, Healthy Children program. It is also a model used in Haldimand-Norfolk where Public Health and Social Services are combined in a single department. For two years, two public health nurses were embedded in the Financial Assistance service to identify clients who could benefit from intensive supports. While this approach was changed in 2014, Haldimand continues to recognize the need for shared client supports between health and social services. The County of Simcoe is also moving to a stronger recognition of social impacts on health outcomes as it adopts the Social Determinants of Health as a policy driver. Sudbury Public Health Unit has also moved in this direction after identifying that the majority of users of its well-baby clinics were families with high incomes, rather

than families with risk indicators. Rather than add staff to either Human Services or Public Health to address the need for a wider range of supports, the integration of services leverages the existing professional skills among County staff to achieve the same outcome.

After Hours Services are recommended as an additional strategy for supporting vulnerable clients as well as working families. Currently if a child misses a school immunization or if a person requires sexual health services or needle exchange support, they are required to attend during business hours. This obliges working people to take time away from work. A review of the need and the resources to provide after-hours services is warranted.

The Service Improvement Opportunity related to Reimagining the Libraries as Community Hubs (see below) could provide additional support through making a wider range of satellite offices available through library buildings and building the Library Programming Service into the additional supports to vulnerable families.

Population Health Services KPI Insights

This group of services are focussed on improving the overall health outcomes of the community at large, including reducing the burden of diseases related to smoking, substance abuse and obesity, falls and injuries, and food and water borne illnesses and rabies, among others. The services range from promotion and advocacy to training and certification and inspections and enforcement. Overall the number of activities has grown, however a method of tying the activity metrics to the outcome metrics is difficult and has not yet been fully developed. This makes it difficult to know what activities create the greatest impact on helping people become better off. Below are some examples of the population health services metrics.

Public Health Promotion and Advocacy

- 2% reduction in % of population (19+) exceeding low risk alcohol drinking guidelines between 2011 and 2014

- 7% reduction in fall related emergency visits in older adults (65+) between 2011 and 2014

Case and Outbreak Management

- 25% reduction in length of respiratory outbreaks between 2011 and 2014
- 8% reduction in Chlamydia cases per 1000 between 2011 and 2014

Health Protection Certification

- 70% increase in number of food handlers certified per year between 2011 and 2014

Health Resource Distribution

- 71% increase in number of vaccine doses distributed between 2011 and 2014

Inspections and Enforcement

- 79% increase in number of fixed premises inspections completed between 2012 and 2014
- 52% increase in the number of complaints, service requests, and referrals for inspection between 2011 and 2014

There is only one Service Improvement Opportunity recommended in this group of services; Public Health Inspectors and Nurses Scheduling, Process and Decentralization Strategy. This SIO is directed at ensuring that the services are being provided in the most productive and effective way and has the potential to identify efficiencies that can be taken as savings or reinvested into the anticipated downloading of more inspections responsibilities.

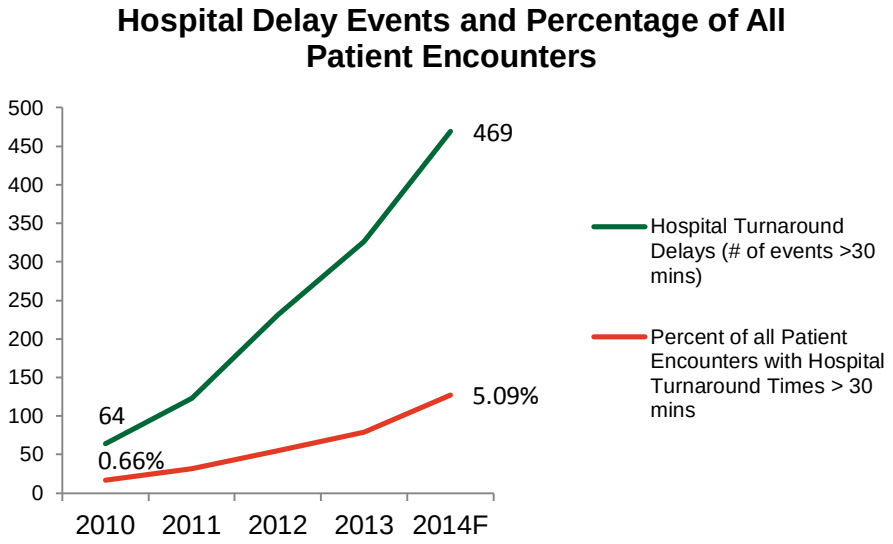
Building Health Partnerships KPI Insights

Currently there is no data for the quantity, quality or results of the Building Health Partnerships Service, however the annual rate of increase in the service cost is about 4%, and the gross cost was budgeted in 2014 as $843,077. Some KPIs are currently being studied by the province to evaluate effective partnerships. These KPIs while useful, are currently focused on the quality of the meetings and engagement rather than the outcomes targeted by the partnerships. Given the substantial commitment of funds and resources, this service should develop outcomes based KPIs and the partnership groups should be held to account for achieving the outcomes.

There is one SIO recommended for this service which is similar to an SIO recommended for the Community Capacity Building Service; Building Health Partnerships Governance and Results Management Policy. As noted above there is opportunity for synergy in the development and monitoring of data for these two services using compatible tools and the same staff.

EMS KPI Insights

EMS is a very strong collector and user of performance data. Some improvement could be gained in identifying "is anyone better off?" measures related to patient outcomes. The issue of greatest concern for EMS is the substantial increase in wait times that can be observed in the tables below. The percentage of all cases that wait longer than 30 minutes at the hospital has risen from 0.66% to 5.09% in four years.



There are three SIOs recommended for EMS: Review of Response Time Standard and Deployment, Review of Hospital Wait Times and EMS Fleet Review. The third SIO will be conducted in collaboration with the review of the entire Corporate Fleet.

Service Improvement Opportunities

Opportunity	Risks and Implications	Potential Savings / Productivity	Timeframe	Barriers
Adopt Social Determinants of Health	Improved county-wide planning	Nominal	Less than one year	Low
Provide County-wide Staff Training on Social Determinants of Health	Improved county-wide planning	Nominal	Less than one year	Low
Transformation to Full Integration of Services Supporting Families,	Improved client service, combining multiple unions and staff.	$100 – 500K	More than one year	Medium

Opportunity	Risks and Implications	Potential Savings / Productivity	Timeframe	Barriers
Children and Singles				
Public Health Nurse and Inspectors Scheduling, Process and Decentralization Strategy	Improved planning and productivity, reduced travel time and expense	$100 – 500K	One year to develop, more than one year to implement	Medium
After Hours Services	Improved client service, potential for staff resistance	Nominal	Less than one year	Low to medium
Building Health Partnerships Governance and Management	Improved accountability for partnership outcomes, potential for partner resistance.	Nominal	Less than one year	Low to medium
Community Paramedicine Planning	Improved planning for potential future download	Net expense	More than one year	Low (for planning)
PHES Records Management	Improved use of digital resources and reduced cost and risk of paper storage	Nominal	Less than one year	Low to medium
Review EMS Response Time Standard and Deployment	Improved productivity and service response	Unknown	More than one year	Medium
EMS Hospital Wait Times Review	Improved productivity with shortened and reduced number of turn around delays, may be hospital resistance to change	Nominal	Less than one year	Medium to high
EMS Fleet Review	Potential for improved shared service with PW	Unknown	Within Wave 2	Low
911 Call Taking and Dispatch Review	Planning for improved or changed technology or single source dispatch	Net expense	More than one year	Low