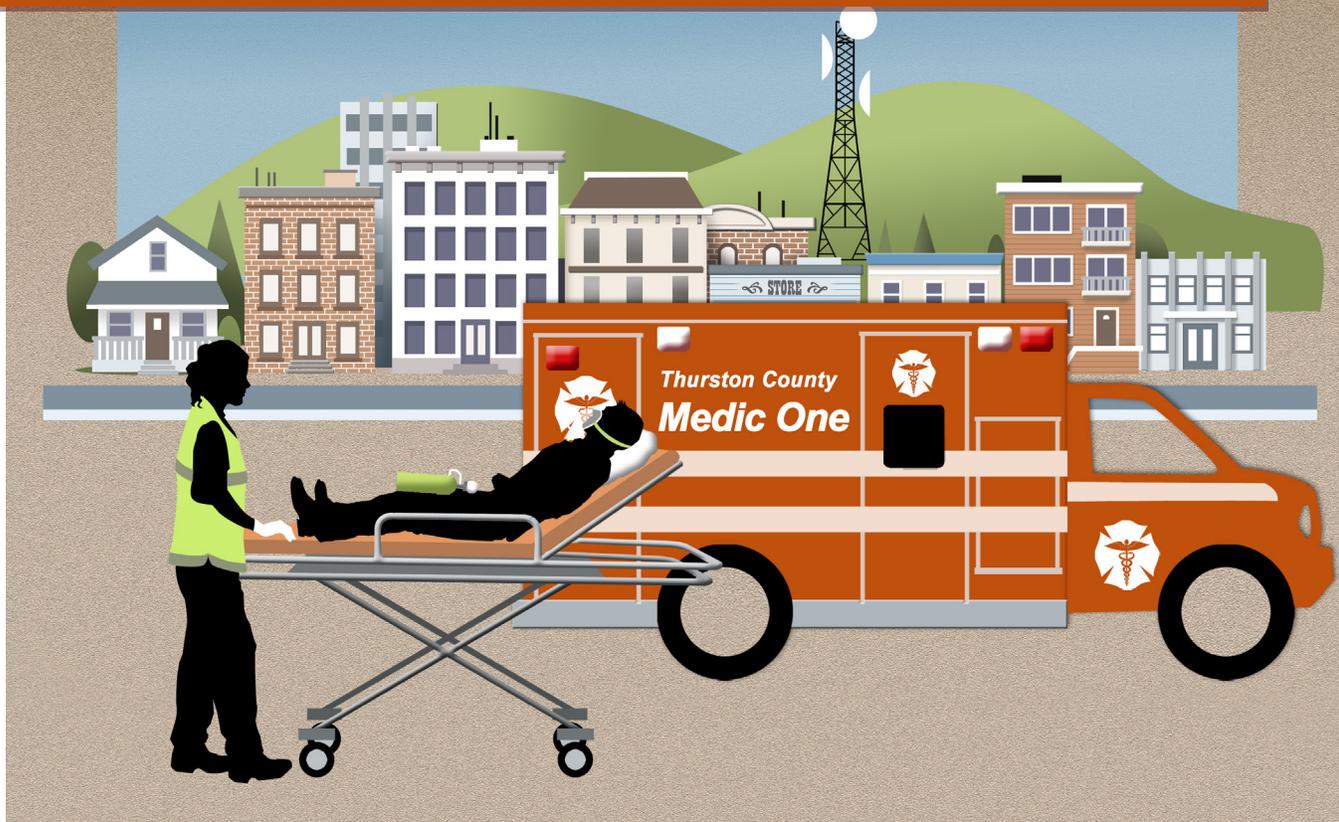


Thurston County Emergency Medical Services System Study



September 18, 2013

Prepared for the
Thurston County Emergency Medical
Services Council

This study was funded by Thurston County Medic One

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EXECUTIVE SUMMARY—FINDINGS

1. Funding

STRENGTHS

1.1 Observation: *TC Medic One operates the region’s public EMS system with a single permanent countywide EMS property tax levy that finances the vast majority of its services and functions.*

1.2 Observation: *Nearly 90 percent of TC Medic One’s budget is programmed for operations, training, EMS support and public education. Less than 5 percent is used for administration, and the remaining is for equipment repair and replacement.*

1.3 Observation: *TC Medic One expanded countywide EMS levels of service through the region’s worst economic recession since the program was created.*

1.4 Observation: *The ALS contract agencies provide a 20 percent match for ALS personnel costs when operating within their jurisdiction.*

Recommendation

1.4.1 TC Medic One staff and the ALS contract agencies should closely monitor system costs, maintain a dialog, and develop a long-term strategy to manage EMS provider personnel costs.

1.5 Observation: *The TC Medic One System does not rely on user fees for system operation. Patients are not charged for ALS transport services.*

1.6 Observation: *TC Medic One provides a fair and equitable distribution of EMS levy revenues and support services to all fire service agencies in the county based on service demand.*

CHALLENGES

1.7 Observation: *Expenditures are exceeding revenues. As of 2011, the County EMS Levy rate is insufficient to generate the revenue necessary to fund TC Medic One’s projected expenditures.*

Recommendation

1.7.1 To help meet rising expenditures, a levy lid lift campaign to restore the original levy rate should be pursued before 2017.

1.8 Observation: *TC Medic One lacks a clear budget policy on the establishment, maintenance, funding level, and use of a reserve account for contingency operations and expenditures.*

Recommendation

1.8.1 The EMS Council should consider establishing a long-term contingency reserve account.

1.9 Observation: *Fire Protection District operations are challenged by diminishing revenues. The risk of EMS service degradation in rural communities could threaten the efficacy of the TC Medic One program.*

Recommendation

1.9.1 The region’s EMS participants should develop a countywide framework for evaluating present and future BLS demand and service capacity to better understand the overall financial and operational impacts to the EMS system.

1.10 Observation: *There is disagreement among stakeholders about the flexibility of the EMS levy to serve TC Medic One and multiple taxing districts.*

Recommendations

1.10.1 The EMS Council should establish clear funding priorities for TC Medic One programs.

1.10.2 Should state legislation ever increase the levy rate limit, the EMS Council, TC Medic One staff, and the fire service agencies should convene discussions on negotiating a potential levy-sharing strategy.

2. Emergency Medical Services System Delivery Model

STRENGTHS

2.1 Observation: *TC Medic One is a regional centralized EMS program that delivers a standardized high level of emergency medical care to anyone, anywhere, at any time throughout Thurston County.*

2.2 Observation: *System wide, TC Medic One ALS units are staffed with two paramedics. This configuration arguably provides a superior level of medical care at the unit level and an overall increase in countywide ALS system readiness.*

Recommendation

2.2.1 TC Medic One should continue exploring and testing a supplemental EMS unit configuration as an intermediate to the standard two-paramedic unit. For example, enabling Advanced EMTs to serve the system in more rural fire districts could improve patient outcomes in areas with longer ALS response time intervals.

2.3 Observation: *Every community in the region stands to benefit from being part of the TC Medic One system.*

2.4 Observation: *TC Medic One staff provides a comprehensive range of administrative and support service functions that strengthen EMS service delivery.*

2.5 Observation: *TC Medic One's provision of initial BLS training, continuing education, in-service paramedic training, and EMS quality assurance activities establish a high standard of first responder EMS care throughout the system that improves patient outcomes.*

CHALLENGES

2.6 Observation: *The nature of ALS services delivery through contract agencies creates discontent and mistrust among some of the system's stakeholders.*

Recommendation

2.6.1 TC Medic One system stakeholders should visit the office of King County Medic One to learn about their system. A series of similar site visits to other neighboring EMS systems could offer local participants with valuable insight as to how Thurston County could improve its system.

3. System Performance

STRENGTHS

3.1 Observation: *When people dial 9-1-1 for help, the EMS system responds: it saves lives and assists and transports people who are seriously sick or injured.*

Recommendation

3.1.1 Beyond the traditional benchmarking focus on cardiac arrest survival rates and response time interval performance, TC Medic One staff in consultation with the Medical Program Director, should continue considering, evaluating, and implementing other appropriate metrics to measure the system's prehospital emergency medical and trauma care across the entire county.

3.2 Observation: *Three agencies provide ALS service countywide, regardless of what jurisdiction a call comes from. Any upgrade to an existing medic unit or the formation of a new unit, regardless of its principal duty location, is an upgrade to the entire county's EMS system.*

3.3 Observation: *The system currently has ample response capacity to fulfill ALS service demands for the next several years.*

3.4 Observation: *ALS response time intervals are well within the State's and TC Medic One's adopted level of service goals countywide.*

Recommendation

3.4.1 TC County Medic One has quality response time data that should be presented, when appropriate, in a format that is accessible and readily understood by a broader audience.

CHALLENGES

3.5 Observation: *More work is necessary to standardize the capture, retrieval, and dissemination of EMS data throughout the system, particularly for BLS response activity data.*

Recommendations

3.5.1 TC Medic One should take a lead role to foster greater EMS data interoperability and information exchange.

3.5.2 TC Medic One should coordinate with fire service agencies to develop agreed upon comprehensive EMS service demand projections for system planning.

4. Governance

STRENGTHS

4.1 Observation: *Policy makers, staff, and stakeholders care about the system.*

CHALLENGES

4.2 Observation: *Some EMS Council members have expressed feelings of mistrust, frustration, and dissatisfaction over recent decision making processes of the TC Medic One system.*

Recommendation

4.2.1 The EMS Council should identify deliberate activities to foster trust among members, learn each other's strengths, and celebrate the Council's successes.

4.3 Observation: *Rural stakeholders have expressed frustration that the composition of the EMS Council is biased toward the urban communities.*

Recommendation

4.3.1 The EMS Council should review Article IV. Composition and Membership of the Bylaws to consider amending the membership to:

1. Include the City of Lacey
2. Add a fourth Citizen-at-Large Physician to eliminate potential appointment conflicts with existing Citizen-at-Large members

4.3.2 Encourage the Thurston County Commissioners to expand Citizen-at-Large outreach efforts to fill positions with members from rural county communities.

4.4 Observation: *Information about the proceedings of the EMS Council is not readily available to the public.*

Recommendation

4.4.1 TC Medic One staff should post and update the following content on its website in an easily accessible format: EMS Council meeting schedule, a list of EMS Council members, meeting agendas, minutes, TC Medic One Budget, and EMS Council Bylaws.

5. Planning

CHALLENGES

5.1 Observation: *TC Medic One does not have a single comprehensive planning document that describes its mission, policies, budget, service delivery model, system performance, future service levels, and strategic initiatives.*

Recommendations

5.1.1 TC Medic One should compile its existing plans into a single cohesive document that outlines its current course of action. This product should serve as a baseline for a strategic planning process with all system stakeholders.

5.1.2 The EMS Council should identify an appropriate planning process and forward a recommendation and planning timeline to the Thurston County Commissioners.

5.1.3 TC Medic One should convene a planning process and seek adoption on a preferred alternative prior to running an EMS levy lid lift.

INTRODUCTION

Background

In October 2012, the Thurston County Emergency Medical Services Council contracted with the Thurston Regional Planning Council (TRPC) to perform an independent study of the Thurston County Medic One (TC Medic One) Emergency Medical Services System. TRPC was tasked to assess the system and identify issues and opportunities that could enhance the provision of Emergency Medical Services (EMS) for Thurston County. This report is a summary of this study's findings.

Pre-hospital emergency medical service programs are complex. They are bound by federal and state regulations, licensing and certification requirements, medical protocols, labor rules, and collective bargaining agreements overseen by multiple managers. The Thurston region's EMS system is an intricate arrangement between the county, cities, fire districts, TCOMM 9-1-1, private ambulance companies, hospitals, and the public. All these entities serve a variety of roles to deliver EMS services where it is needed. A myriad of independent revenue sources and governing bodies make decisions about all of the various system components. This report describes many of these components.

Adding to the complexity of such a system are apparent long-standing disagreements among system stakeholders and Council members about the budget, the service delivery model, levels of service, decision making processes, and planning needs. There are fears about the sustainability of funding current service levels in the future. Furthermore, there are uncertainties as to how the nation's Affordable Care Act will impact EMS services in the region. This report offers recommendations to help stakeholders overcome some of these challenges.

Methods

TRPC conducted the study from October 2012 through June 2013. The EMS Council provided TRPC great latitude to learn about the system - its functions, participants, culture, and ways of doing business. TRPC was free to explore a great variety of issues from stakeholders. During the course of the study, TRPC met periodically with an EMS Council subcommittee to discuss the project, so the subcommittee could supply a progress report to the Council.

TRPC staff facilitated two discussions and information gathering activities during the regularly scheduled EMS Council meetings on October 17 and December 19, 2012. These efforts supplied TRPC with an overview of participants' views and the nature of the issues that framed subsequent discussions with stakeholders.

From October 2012 to May 2013, TRPC staff interviewed over 50 individuals from multiple organizations within Thurston County and around the greater Puget Sound Region. The majority of the interviewees are involved in day to day operations of EMS systems in and outside of Thurston County such as Fire Chiefs, TC Medic One staff, the Medical Program Director, EMS providers, and EMS Program Directors. TRPC also interviewed Thurston County Emergency Medical Service Council members, Fire

Commissioners, and other elected representatives. Anyone who expressed interest in sharing their views was provided an opportunity to meet with the principal investigator.

Emergency Medical Services Stakeholders Interviewed by TRPC

Elected Representatives and Citizen Appointees

Kathleen Bostwick, Fire Commissioner, South East Thurston Regional Fire Authority*

John Christiansen, Fire Commissioner, Lacey Fire District 3

Tom Fell, M.D., Citizen Representative, EMSC*

Milt Harper, Fire Commissioner, North Olympia Fire and Rescue District 7

Russ Hendrickson, Council Member, City of Yelm – South County Mayors Representative*

Frank Kirkbride, Fire Commissioner, Lacey Fire District 3*

Stephen Langer, Council Member, City of Olympia*

Margaret McPhee, Citizen Representative, Chair, EMSC*

Dennis McVeigh, Council Member, City of Rainier

Tom Nelson, Fire Commissioner, Lacey Fire District 3

Ken Parsons, Fire Commissioner, South Bay Fire Department (District 8)*

Dave Ribachi, Citizen Representative, EMSC*

John Ricks, Fire Commissioner, West Thurston Regional Fire Authority*

Randy Schleis, Mayor, City of Rainier

Richard Small, Fire Commissioner, South Bay Fire Department (District 8)

Betsy Spath, Council Member, City of Tumwater*

Karen Valenzuela, County Commissioner, Thurston County District 3*

Judy Wilson, Fire Commissioner, Lacey Fire District 3

**Current or former member of the Thurston County Emergency Medical Services Council (EMSC)*

Thurston County Fire Protection and EMS Agency Personnel

Steve Brooks, Chief, Lacey Fire District 3

Mary Campbell, Branch Director, Olympic Ambulance - Thurston County

John Carpenter, Chief, Tumwater Fire Department

Larry Dibble, Chief, Olympia Fire Department

Kathy Dickson, Division Chief, Lacey Fire District 3

James Fowler, Chief, Bucoda Fire Department

Jim McGarva, Assistant Chief, Tumwater Fire Department

Mark Gregory, Chief, Bald Hills Fire Department (District 17)

Byron Hamilton, Operations Manager, Olympic Ambulance - Thurston County

Ray Harry, Interim Chief, North Olympia Fire and Rescue District 7

Karen Hoffman, Firefighter/Paramedic, Lacey Fire District 3

Russell Kaleiwahea, Chief Administrative Officer, West Thurston Regional Fire Authority (Districts 1 and 11)

Mark King, Chief, South East Thurston Regional Fire Authority (Districts 2 and 4)

Mel Low, Chief, East Olympia Fire District 6

Steve North, Chief, McLane-Black Lake Fire Department (Districts 5 and 9)

John Nunn, Assistant Chief, Griffin Fire Department (District 13)

Gary Pearson, Assistant Chief, Lacey Fire District 3

Andrew Schaffran, Chief, Gibson Valley Fire District 16

Robert Scott, Chief Operations Officer, West Thurston Regional Fire Authority (Districts 1 and 11)

Tina Vanderhoof, Office Administrator, Tenino Fire Department (District 12)

Brian Van Camp, Chief, South Bay Fire Department (District 8)

Wayne Whidden, Captain, Griffin Fire Department (District 13)
Greg Wright, Deputy Chief, Olympia Fire Department
John Wood, Chief, Griffin Fire Department (District 13)

EMS Professionals Outside Thurston County

Mark Correira, Chair, EMS Section, Washington Fire Chiefs (Assistant Chief, Snohomish Fire District 1)
John Herbert, Chief, King County Medic One
Michael Lopez, Director of Washington Emergency Medical Services Division, Washington State Department of Health
Barb Lovato, Director, Kitsap County EMS Council
Norma Pancake, EMS Coordinator, Pierce County
Randy Vanderheiden, Director, Whatcom Medic One
Jim Walkowski, Chief, Riverside Fire Authority (Lewis County)

Thurston County Staff

Anna Lee Drewry, Basic Life Support Training Coordinator, TC Medic One
Fay Flanery, Office Manager, TC Medic One
Larry Fontanilla, M.D., Thurston County Emergency Medical Program Director
Catherine Griffin, Reception and Data Entry, TC Medic One
Cindy Hambly, Training Quality Improvement Manager, TC Medic One
Don Krupp, County Manager, Thurston County
Alan Provencher, Purchasing Agent/Public Education Coordinator, TC Medic One
Steve Romines, Director, TC Medic One
Pete Suver, Advanced Life Support Coordinator, TC Medic One

During the study, TRPC performed an extensive review of documents, information, and data. The principal investigator reviewed reports, plans, budgets, meeting minutes, and data principally from TC Medic One, fire service agencies, and the State Department of Health. TRPC also collected EMS system plans and studies from neighboring EMS systems, studied state laws and regulations, and analyzed a small collection of peer reviewed emergency medical journal articles that are germane to the issues identified throughout the course of the study. In addition, system participants offered unsolicited information that they believed was relevant to the study. TRPC also performed an independent analysis of Advanced Life Support (ALS) data for the entire county, and compiled a simplified EMS incident forecast from the present to 2035.

Findings

The findings are categorized into five sections:

1. Funding
2. Emergency Medical Services Delivery Model
3. System Performance
4. Governance
5. Planning

Each section includes an introductory narrative followed by observations that are characterized as system strengths or challenges and are formatted throughout the report as follows:

Strength Observations: *are numbered and highlighted in green.*

Challenge Observations: *are numbered and highlighted in red.*

Recommendations are numbered and shown in bold following the related observation. They are included for both strengths and challenges where appropriate.

FINDINGS

1. Funding

The long-term viability of a community's Emergency Medical Service (EMS) system requires a sustainable source of funding. A steady revenue stream is critical for both the ongoing operations and maintenance of the system as well as building an adequate reserve for contingencies. EMS system components must be financially solvent to allow the uninterrupted delivery of essential services. A poorly funded system will struggle to meet service goals, result in deferred maintenance on equipment and vehicles, and impact capital facilities. Most importantly, inadequate funding risks jeopardizing lifesaving emergency medical services to seriously injured or sick individuals. Once service levels degrade, it is difficult and expensive to elevate system performance to desired standards.

Washington State communities use a variety of funding mechanisms to operate their EMS systems. Many communities use multiple revenue sources. The most common sources include:

- EMS property tax levy
- Fire District levy
- Local government general fund
- Local option retail sales tax
- Transport service revenue or user fees (charge patient for services)
- Maintenance and operations levy
- Excess levy

STRENGTHS

1.1 Observation: *TC Medic One operates the region's public EMS system with a single permanent countywide EMS property tax levy that finances the vast majority of its services and functions.*

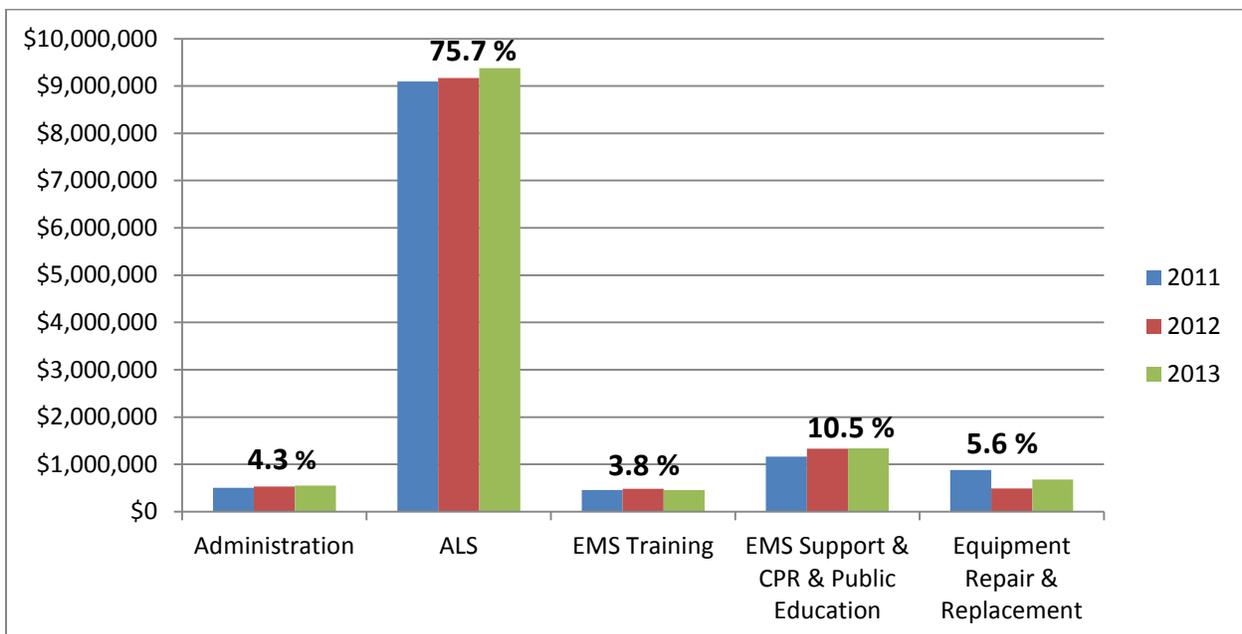
Thurston County is unique as the only community in the state that operates a countywide centralized EMS program with a single permanent levy. In comparison, King County Medic One operates on a six-year levy. Pierce, Lewis, Kitsap and Skagit counties rely on a combination of levies and ambulance transport fees. Whatcom County Medic One uses general funds, local option retail sales tax, and transport fees.

Washington counties and other taxing districts can request from voters the authority (RCW 84.52.069) to levy an additional property tax up to \$0.50 per \$1,000 of assessed value to operate EMS programs. Counties have the option of imposing this levy for six years, ten years, or permanently. In 1999, Thurston County voters approved a permanent EMS levy at the maximum rate (see 1999 EMS Levy Ballot in Appendix A). Prior to this, TC Medic One ran an annual excess levy ballot measure at the cost of \$55,000; this funding is now available for system services. In 2012, the EMS levy supplied 99 percent of the TC Medic One's revenue.

1.2 Observation: Nearly 90 percent of TC Medic One’s budget is programmed for operations, training, EMS support and public education. Less than 5 percent is used for administration, and the remaining is for equipment repair and replacement.

The majority of the EMS Levy is programmed for the delivery of emergency medical care, training, and public education. Between 2011 and 2013, TC Medic One’s budget allocated nearly 76 percent of its resources toward Advanced Life Support (ALS) services. Both the ALS and EMS support programs include the medical oversight of the TC Medic One system performed by the Medical Program Director and staff. The administrative cost of managing the program is less than 5 percent. This is an exceptionally low portion of the program’s overall budget (see Figure 1.1).

Figure 1.1: 2011-2013 TC Medic One Budget Program Expense Summary



Note: The percentages shown are the 3-year average for each budget program.

Source: TC Medic One 2013 Budget Package

1.3 Observation: TC Medic One expanded countywide EMS levels of service through the region’s worst economic recession since the program was created.

Between 2009 and 2013, Thurston County’s total assessed valuation dropped 21 percent from \$30.1 billion to \$23.8 billion. During those years, Medic One persevered through the economic recession without cutting services or faltering on its ability to meet service demands. It instead has expanded its EMS support programs and bolstered paramedic units with the program’s existing revenues.

1.4 Observation: *The ALS contract agencies provide a 20 percent match for ALS personnel costs when operating within their jurisdiction.*

TC Medic One leverages its revenues with funds matched by the contract agencies to deliver ALS services countywide. Lacey Fire District 3 and the cities of Olympia and Tumwater contribute a 20 percent match toward personnel costs to maintain their paramedics' firefighting capabilities within their departments. TC Medic One covers 100 percent of ALS personnel costs when the contractors operate ALS-only service units outside of their jurisdiction. This approach allows TC Medic One to contract for the equivalent of 59 paramedics for the cost of 49.

While this cost sharing strategy seems mutually beneficial, it is the only personnel cost control mechanism available to the ALS system. TC Medic One is not a party to the collective bargaining unit agreements, so it has no influence over the salaries and benefits of the contract agencies' paramedics. As the service demands of the ALS units increase, less time may be available for paramedics to perform fire service related training or duties.

Recommendation

1.4.1 TC Medic One staff and the ALS contract agencies should closely monitor system costs, maintain a dialog, and develop a long-term strategy to manage EMS provider personnel costs.

1.5 Observation: *The TC Medic One System does not rely on user fees for system operation. Patients are not charged for ALS transport services.*

The ALS service does not rely on user transport fees to finance the system, therefore no administrative resources are allocated to track, perform billing services, and collect fees from patients. It is important to recognize the universal access benefits of a system that doesn't charge critically ill or injured patients for ambulance service to a hospital. The absence of transport fees removes a significant barrier for sick people with limited income who may otherwise second guess dialing 9-1-1 to access the EMS system. However, two private ambulance companies and two public fire service agencies in Thurston County that offer BLS transport services do charge fees. Approximately 90 percent of 9-1-1 BLS transport services are operated by Olympic Ambulance and AMR private ambulance companies. While there is a fee for users, taxpayers do not pay for BLS transports.

1.6 Observation: *TC Medic One provides a fair and equitable distribution of EMS levy revenues and support services to all fire service agencies in the county based on service demand.*

TC Medic One recognizes that all agencies perform a critical role in providing EMS services within the county. To support EMS services countywide, the program allocates approximately 11 percent of its budget to BLS direct support and training support. These resources are distributed across the system to all 15 fire service agencies in the region. In general, TC Medic One provides 100 percent of the agencies' EMS supplies and equipment. It also offers all of the Emergency Medical Technician (EMT) initial training, Ongoing Training and Evaluation Program (OTEP) and licensure and certification tracking countywide for all agency EMS personnel. As shown below, in 2012 Thurston County allocated \$1,353,092 in direct EMS support funds and support services to all partner agencies.

2012 BLS Direct Support, \$880,529

Financial Support, \$500,293

- \$11,000 in base support is equally allocated to every agency. \$258,192 is divided proportionally to all agencies, based on EMS call volume at a rate of \$10.19 per call
- \$2,750 in base support for mobile computer technology is equally allocated to every agency. \$38,550 is divided proportionally to all agencies, based on EMS call volume at a rate of \$1.52 per call
- This financial support is provided as a direct lump sum payment to each agency for EMS services, at their discretion

Supplies and Equipment, \$380,236

- \$6,000 in base support is equally allocated to every agency. \$290,236 is divided proportionally to all agencies, based on EMS call volume at a rate of \$11.46 per call
- Supplies and equipment financial assistance is provided in the form of an account for stock supplies and special orders

2012 Training Support, \$472,563

Initial EMT Training, \$249,889

- 68 students completed the Initial EMT training

OTEP and the online EMS training system (King County Online), \$222,674

- 496 EMS providers registered at \$449 each

In addition to the BLS direct support and training support programs, the system performs other key functions and services at a countywide level that both directly and indirectly benefit the system at no cost to the participants. The programs listed below represent about 6 percent of the 2012 TC Medic One budget, totaling \$721,442.

- **Computer Based Dispatch (CBD) training** for TCOMM 9-1-1 personnel provides consistent call processing throughout the county.
- **Nurse Health Line** reroutes medical calls from dispatch to a registered nurse with the caller's consent. This service reduces response demand countywide.
- **Required and routine vaccinations** for all public EMS personnel in the county are covered by TC Medic One.
- **Surplus former medic unit aid vehicles** are distributed free of charge on a priority needs basis to all agencies in the county.
- **Public education** is an EMS system enhancer. CPR and public education programs increase community members' awareness of their EMS system and train the public to become better first responders within their community. TC Medic One partners with Thurston County Safe Kids in youth injury prevention programs. EMS public education programs make the entire county a safer place.

CHALLENGES

1.7 Observation: *Expenditures are exceeding revenues. As of 2011, the County EMS Levy rate is insufficient to generate the revenue necessary to fund TC Medic One's projected expenditures.*

The Thurston County Office of the Assessor sets the levy rates based on taxing district budget requests, statutory limits, and property values. Although TC Medic One has a dedicated EMS levy, it is subject to the effects of the real estate market. Following the echo of the housing boom, the EMS levy rate experienced a steady drop from \$0.50 in 2000 to \$0.28 by 2009. Throughout the recession, home property valuations and new construction diminished significantly through 2013. The rise and fall of the levy rate has not reduced the total revenue generated year over year since the permanent levy was approved. In fact, the EMS Levy revenue increased 6.89 percent between 2010 and 2013. However, the state's imposition of a 1 percent annual property tax increase limit (RCW 84.52.050) stymies the levy's capacity, without voter approval, to keep pace with the program's expenditures.

Rising personnel, operations, capital, and system expansion expenditures present ongoing challenges to closing the gap between expenditures and levy revenue. Between 2008 and 2012, the program's annual average operating costs increased by approximately 4.5 percent. In 2011, a policy decision was made to expand the service levels of two medic units, but under an incremental phased approach to lessen the impacts to the budget. TC Medic One estimates that the program can maintain its current levels of service from the levy and its reserve funds until the year 2017 (assuming a 4.5 percent annual expenditure growth factor and a 1 percent levy rate increase plus 0.5 percent new construction).

Table 1.1 shows a budget scenario projection for TC Medic One with no additional service expansion between 2013 and 2017 with an average annual 4.5 percent increase in operating expenses. Under this scenario, TC Medic One will likely exceed its operating budget by approximately \$4.7 million by 2016. The total assessed property valuations for Thurston County will need to exceed \$24.4 billion by 2017 (2.5 percent greater than 2013 total assessed valuation) for the EMS levy lid lift to raise sufficient revenue for TC Medic One to maintain current service levels in the future.

Recommendation

1.7.1 To help meet rising expenditures, a levy lid lift campaign to restore the original levy rate should be pursued before 2017.

Table 1.1: Actual (2003-2012) and Projected (2013-2017) EMS Levy and TC Medic One Expense Budget

Tax Year	Total Assessed Values* (billions)	% Annual Assessed Value Growth	New Construction (millions)	Average Tax Rate/\$1,000	Property Taxes Levied (millions)	EMS Levy Rate/\$1,000	TC Medic One Taxes Levied (millions)	% Annual Levy Growth	Expense Budget w/o Service Increments (millions)	% Annual Expense Growth	Deficit (millions)
2003	\$14.146		\$354.7	14.247	\$201.550	0.436	\$6.162		\$5.805		
2004	\$15.351	8.5%	\$452.5	13.794	\$211.763	0.440	\$6.761	9.7%	\$5.490	-5.426%	
2005	\$17.300	12.7%	\$555	13.119	\$227.024	0.409	\$7.082	4.7%	\$5.308	-3.315%	
2006	\$19.930	15.2%	\$695	12.119	\$241.557	0.373	\$7.436	5.0%	\$6.389	20.365%	
2007	\$23.474	17.8%	\$985	11.202	\$262.955	0.336	\$7.887	6.1%	\$7.513	17.593%	
2008	\$28.809	22.7%	\$1.1 billion	9.752	\$280.943	0.290	\$8.349	5.9%	\$8.219	9.397%	
2009	\$30.117	4.5%	\$754	9.867	\$297.763	0.289	\$8.697	4.2%	\$8.437	2.652%	
2010	\$29.249	-2.9%	\$509	10.425	\$304.908	0.305	\$8.923	2.6%	\$8.576	1.648%	
2011	\$27.144	-7.2%	\$330	11.607	\$314.785	0.337	\$9.134	2.4%	\$9.748	13.666%	
2012	\$25.689	-5.4%	\$300	12.624	\$323.964	0.365	\$9.378	2.7%	\$9.770	0.226%	
2013	\$23.803	-7.3%	\$287	13.635	\$324.24	0.401	\$9.538	1.7%	\$10.21	4.548%	-\$0.676
2014*	<u>\$23.96</u>	0.7%	<u>\$129</u>	unknown	unknown	unknown	\$9.68	1.5%	\$10.68	4.548%	-\$0.998
2015	unknown	unknown	unknown	unknown	unknown	unknown	\$9.83	1.5%	\$11.16	4.548%	-\$1.339
2016	unknown	unknown	unknown	unknown	unknown	unknown	\$9.97	1.5%	\$11.67	4.548%	-\$1.699
2013-2016 Total Deficit:											-\$4.712
Assumption: Voter approved levy lid lift @ \$0.50 per \$1,000 AV and fair market value assessment growth											
2017	\$24.395	2.5%>2013				0.50	\$12.20	22.4%	\$12.20	4.500%	\$0.000

Sources: Thurston County Office of the Assessor; TC Medic One Levy/Expense Projections

*The Olympian, June 4, 2013, "Property values finally up, as county mails tax assessments"

<http://www.theolympian.com/2013/06/04/2570692/property-values-finally-up-as.html>

Explanation These values assume no service expansion between 2013 and 2017. The 2013 budget is reduced to \$10.21 million. This assumes that actual expenditures will be lower than what is budgeted (it is 4.5% higher than the adopted 2012 budget). 2014-2017 budget increases by 4.5% each year.

1.8 Observation: *TC Medic One lacks a clear budget policy on the establishment, maintenance, funding level, and use of a reserve account for contingency operations and expenditures.*

TC Medic One has conservatively managed its expenditures and preserved a substantial ending fund balance each year since 2000. By 2012, Medic One carried forward a balance of approximately \$8,006,000. A separate reserve account from the pre-1999 levies accumulated a net carry over balance (with interest) of \$10.8 million. Combined, the reserve and operations funds total \$18.6 million in surplus revenue. These funds are projected to be depleted by 2017 to offset expenditures not covered by the EMS Levy. While the system is fortunate to have access to surplus revenues to sustain EMS services, reserve funds should not be depleted without a plan to restore them to an adequate level to maintain public safety. Thurston County is a safe place, but it is not immune to the catastrophic effects of natural disasters, mass casualty incidents, or catastrophes that may arise in or around Thurston County.

Recommendation

1.8.1 The EMS Council should consider establishing a long-term contingency reserve account.

1.9 Observation: *Fire Protection District operations are challenged by diminishing revenues. The risk of EMS service degradation in rural communities could threaten the efficacy of the TC Medic One program.*

The success of the ALS system rests on the capacity of BLS services. Thurston County rural fire districts face budget challenges to sustain predominantly volunteer-based EMS operations. Some agencies have experienced significant budget cuts - due to declining property values, and slowed new construction (see Table 1.2). Most notably, East Olympia, South Bay, Gibson Valley, and Bald Hills Fire Districts have all experienced nearly 20 to 26 percent revenue declines since 2010. While it is not TC Medic One's responsibility to resolve individual fire department's budget crises, the effects of service degradation could have profound implications for the long-term delivery of EMS services to potential at risk communities.

Table 1.2: Summary of Fire District Levy Revenues, 2012 to 2013.

Fire District	2012	2013	Percent Change	2013 Levy Rate
District 3 (Lacey)	\$10,822,116	\$11,011,219	1.8	\$1.458
District 5 (Black Lake)	\$943,307	\$895,535	-5.1	\$1.457
District 6 (East Olympia)	\$1,913,446	\$1,807,827	-5.5	\$1.50
District 7 (North Olympia)	\$689,315	\$702,688	1.9	\$1.459
District 8 (South Bay)	\$1,658,859	\$1,490,007	-10.2	\$1.50
District 9 (McLane)	\$2,444,689	\$2,271,947	-7.1	\$1.369
District 12 (Tenino)	\$537,920	\$504,057	-6.3	\$1.50
District 13 (Griffin)	\$1,265,979	\$1,281,783	1.3	\$1.454
District 15 (Munn Lake)	\$93,952	\$96,826	3.0	\$0.737
District 16 (Gibson Valley)	\$48,386	\$40,584	-16.1	\$1.0
District 17 (Bald Hills)	\$471,658	\$416,086	-11.8	\$1.50
SE Thurston RFA	\$2,699,395	\$2,411,677	-10.7	\$1.50
West Thurston RFA	\$2,460,962	\$2,259,605	-8.2	\$1.50

Data Source: Thurston County Office of the Assessor, "Statistical Report of 2012 Assessments for Taxes Payable in 2013"

All fire service agencies experience budget challenges and must prioritize services and reduce expenditures. EMTs and paramedics are essential personnel. Since 2005, six local departments including Lacey, Black Lake and McLane Fire Districts, Southeast Thurston and West Thurston Regional Fire Authorities, and Tumwater Fire Department have used U.S. Federal Emergency Management Agency (FEMA) "Staffing for Adequate Fire and Emergency Response" (SAFER) grants to fund adequate personnel levels. These grants are not a permanent funding solution, and are evidence that many fire districts struggle to maintain National Fire Protection Association's recommended staffing standards (NFPA 1710).

Agencies that rely on ambulance transport fees will likely experience negative impacts to reimbursement levels. The temporary Medicare ambulance bonus payments (2% urban and 3% rural) enacted by the Medicare Modernization Act were allowed to expire at the end of 2012. The Affordable Care Act is also expected to negatively impact reimbursement rates by reducing the rate of the annual inflationary adjustment. Sequestration will also likely affect reimbursement levels. These factors will negatively impact revenues collected by McLane/Black Lake Fire District, West Thurston Regional Fire Authority, and the private operators - who rely on fee-based BLS transport services, and are a critical participant in the region's EMS system.

Many districts are collecting their maximum \$1.00 or \$1.50 levy rate to fund a variety of operations. Asking voters for additional revenue could be an insurmountable task given that historic election results indicate that rural voters are less inclined to vote "yes" on property tax increases than their neighbors in the cities.

Recommendation

1.9.1 The region's EMS participants should develop a countywide framework for evaluating present and future BLS demand and service capacity to better understand the overall financial and operational impacts to the EMS system.

1.10 Observation: *There is disagreement among stakeholders about the flexibility of the EMS levy to serve TC Medic One and multiple taxing districts.*

State law (RCW 84.52.069(6)) enables other taxing districts, such as fire districts, to seek a voter approved levy to collect excess portion of the County EMS levy (\$0.50 minus the current EMS levy rate).

The current levy rate and service delivery model does not offer sufficient capacity to subsidize EMS services by participant agencies. This is further complicated by annual variations in the rate. Given TC Medic One’s projected budget deficits outlined earlier, this is not a suitable option:

1. There isn’t enough revenue available to finance all the necessary components of ALS and BLS
2. It is unsustainable to rely on a countywide levy to resolve an individual fire service agency’s budget problems
3. Using the EMS levy to sustain long-term BLS operations will require cuts to other EMS services and functions

Recommendations

1.10.1 The EMS Council should establish clear funding priorities for TC Medic One programs.

1.10.2 Should state legislation ever increase the levy rate limit, the EMS Council, TC Medic One staff, and the fire service agencies should convene discussions on negotiating a potential levy-sharing strategy.

2. Emergency Medical Services System Delivery Model

“In Washington State, if you have seen one EMS system, you’ve seen one.”

- Michael Lopez, EMS Section Supervisor, Washington State Department of Health

The design and structure of EMS systems can vary considerably between communities throughout the state and the nation. Although there are general similarities between some Washington community models, no two are alike. Industry standards and federal and state regulatory requirements form the basis for effective system design; however, each community tailors the components of its system to meet their needs and wants.

While, the majority of people interviewed during this study expressed satisfaction with the current model, there are some dramatic philosophic differences of opinion as to how the system should function. Some stakeholders question the effectiveness of the range of pre-hospital care services currently provided by the EMS system. Some believe the current system design is working well and no change is warranted. Some have expressed evaluating a radical departure from the current service model to streamline services. Others advocate for evaluating an expansion of the current scope of services deployed in the out-of-hospital setting in anticipation of health care reform.

NFPA 450, Guide for Emergency Medical Services and Systems offers guidelines, resources, and recommendations for EMS system planners. Numerous pre-hospital emergency medicine journal articles attempt to tackle the issue of system design and service optimization. There is no conclusive evidence that one particular system model is better suited for any given community based on population, geography, political conditions, public vs. private contract systems, or EMS personnel skill level deployment configurations. Nevertheless, these professional resources combined with effective medical oversight are indispensable to system administrators, planners, and operators to continually optimize an EMS system. How a system is designed has as much to do with a community’s available resources, partner relationships, and community values as it does with evidence-based system performance criteria.

As far as the public is concerned, the system must achieve the highest possible levels of patient care given the funding, human resources, and the ability of the provider agencies to deliver services that are aligned with their community’s expectations. When someone dials 9-1-1, they expect the best level of professional emergency care as rapidly as possible, at any place, at any time – regardless of the service delivery model. This is the standard by which the public will judge the effectiveness of tax-payer funded EMS system and vote accordingly.

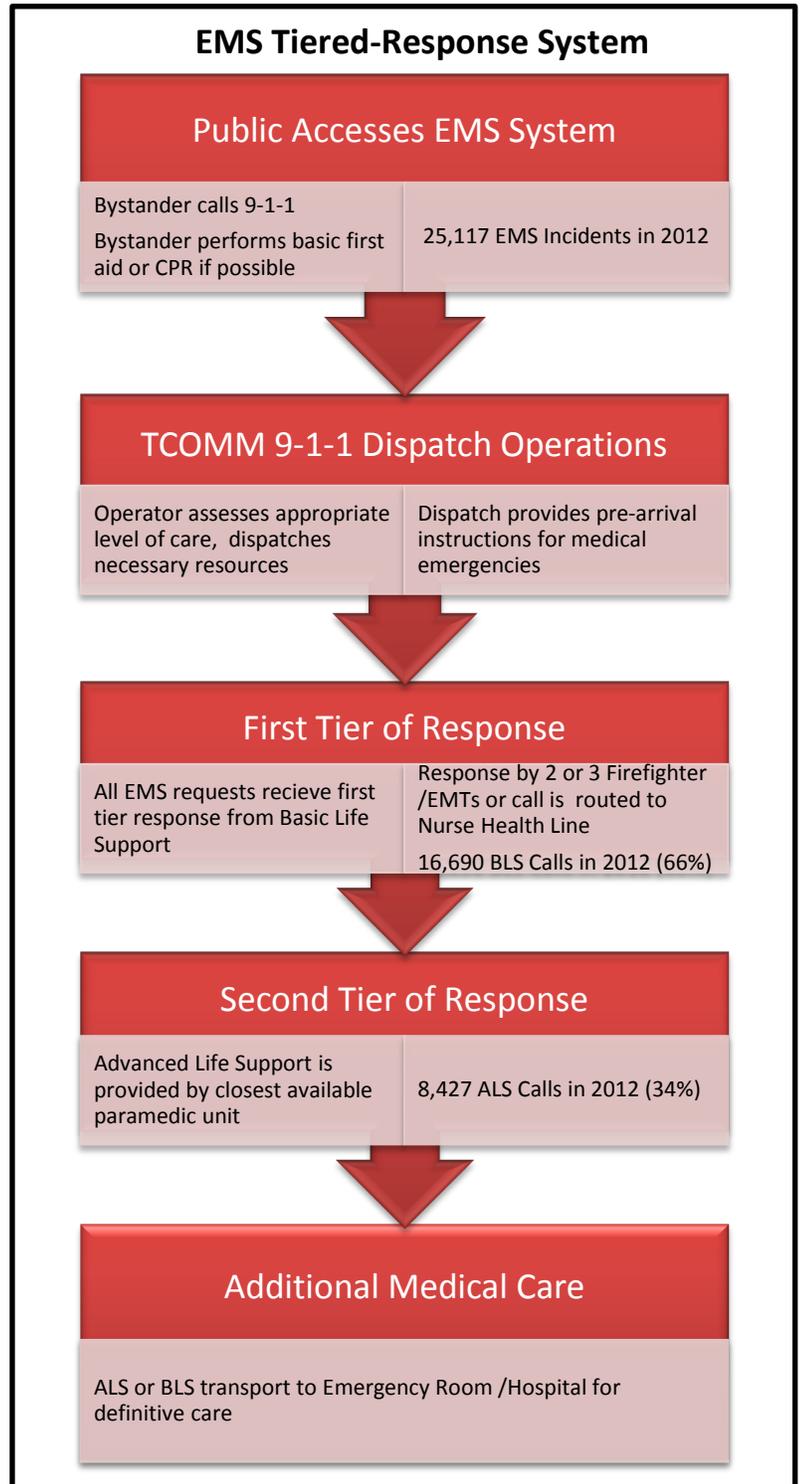
Strengths

2.1 Observation: *TC Medic One is a regional centralized EMS program that delivers a standardized high level of emergency medical care to anyone, anywhere, at any time throughout Thurston County.*

Thurston County is a good place to be if one has the misfortune to experience a medical emergency. The clear benefit of the region’s system is that anyone, no matter if they are a resident, worker, or visitor—or no matter where they are—will receive the same standard of pre-hospital emergency medical care. This is not the case in neighboring Pierce, Lewis, and Mason counties who operate decentralized EMS systems with a variety of independent EMS service models, defined by multiple jurisdictional boundaries.

The Thurston region’s EMS system is a countywide fire service operated tiered-response emergency medical program. Every fire department or district within the county participates as an operator under a uniform set of defined pre-hospital treatment and patient management guidelines. Map 1 shows the operational boundaries of the region’s fire and EMS agencies. The tiered-response model operates on the principle that the majority of 9-1-1 EMS system requests are non-life threatening, and are appropriately addressed by BLS care (over 66 percent of calls in 2012). Since fewer calls are of a life threatening nature, the model deploys fewer paramedics and controls their utilization for situations that require advanced medical treatment (34 percent of calls in 2012).

Every EMS call is met with a BLS response. Every fire service agency is an independent authority having jurisdiction for the provision



of BLS care and transport within their area of operation. Auto- and mutual-aid agreements provide system back up and redundant services when necessary between neighboring jurisdictions.

EMTs are the backbone of the EMS system, which are trained and certified to provide emergent life support care for life threatening conditions. Typically, two or three EMTs respond to an incident. They are deployed in greater numbers throughout the county with greater proximity to neighborhoods and population centers.

When a patient requires more advanced medical interventions, the system will dispatch paramedics. Medic units consist of two paramedics and an aid vehicle. Medics possess a greater range of medical skills and authorities to assess and treat a patient with life threatening conditions such as advance airway management, cardiac pacing, and intravenous drug administration. Medics are stationed to provide ALS care to a much larger geographic areas, albeit with fewer requests for service than BLS calls. Regardless of the call type, patients in need of definitive care at a hospital or other medical treatment facility will receive a BLS or ALS transport depending on the nature of the patient's condition.

2.2 Observation: *System wide, TC Medic One ALS units are staffed with two paramedics. This configuration arguably provides a superior level of medical care at the unit level and an overall increase in countywide ALS system readiness.*

The EMS system staffs all ALS units with two paramedics. This is the system's preferred model for ALS service delivery and has been supported by past and present Medical Program Directors. This model can arguably deliver enhanced care by allowing the Medical Program Director to focus on the training needs of a small company of highly skilled people who are relatively busy treating the most sick or injured patients who access the system. The following rationale maintains that a two medic ALS unit system is better than a one medic plus EMT unit system:

- Two medics provide double the ALS skill set for acute medical and trauma patients
- The American Heart Association recommends a minimum of two Advanced Cardiovascular Life Support providers plus a minimum of two BLS personnel at a scene to assist cardiac arrest victims
- Two medics can divide their attention to accommodate multiple victims
- ALS transports sometimes require two medics to sustain or address patient needs en route to a trauma center; an EMT can be borrowed from a BLS unit to operate the vehicle
- Maintaining a countywide EMS personnel roster with a greater number of paramedics preserves ALS system readiness when contingencies require the activation of off duty medics

Nearly 64 percent of the total budget is programmed to cover ALS personnel costs. Some system stakeholders suggest that TC Medic One should explore operational efficiencies that could be gained by using a single paramedic plus single EMT ALS unit configuration. TC Medic One could reduce its ALS operating costs by staffing their ALS units with a medic and EMT; a standard staffing configuration for

ALS deployment (NFPA 1710, 5.3.3.3.4). This configuration is common in other EMS systems throughout the U.S. and in Lewis and Pierce Counties. Not every ALS call requires two medics, so ALS operations costs could be slightly reduced with this alternate staffing level. Running a paramedic plus EMT could provide faster ALS response time intervals in the more remote areas of Thurston County if there were additional ALS units in the system staffed under this configuration.

A simplified cost analysis (Table 2.1) comparing a two medic ALS unit with a medic plus EMT ALS unit reveals a modest savings. The TC Medic One system presently contracts for a total of 59 medics. On average, there is about a 10 percent differential in personnel costs between firefighter/paramedics and firefighter/EMTs among Lacey Fire District 3 and the Olympia and Tumwater Fire Departments. Assuming the system replaces 27 medics with EMTs (resulting in 27 EMTs and 31 medics), TC Medic One could reduce ALS personnel service costs by nearly \$238,300 or approximately 4 percent less than what is presently programmed in 2013 for all-medic staffed units.

Table 2.1: Simplified Cost Comparison between a Two Medic vs. a One Medic plus EMT ALS Unit Configuration

Two Medic ALS Unit					Medic plus EMT ALS Unit						
Agency	Unit	Medics FTE	Medic Rate	Medic Costs	EMTs FTE	EMT Rate (10% Less)	EMT Costs	Medics FTE	Medic Rate	Medic Costs	Total Wages
OFD	M4	9	\$97,291	\$875,619	4	\$88,446	\$353,784	5	\$97,291	\$486,455	\$840,239
	M10	9	\$97,291	\$875,619	4	\$88,446	\$353,784	5	\$97,291	\$486,455	\$840,239
TFD	M5	9	\$96,141	\$865,269	4	\$87,394	\$349,576	5	\$96,141	\$480,705	\$830,281
	M14	8	\$96,141	\$769,128	4	\$87,394	\$349,576	4	\$96,141	\$384,564	\$734,140
LFD3	M2	8	\$97,590	\$780,720	4	\$88,718	\$354,872	4	\$97,590	\$390,360	\$745,232
	M3	9	\$97,590	\$878,310	4	\$88,718	\$354,872	5	\$97,590	\$487,950	\$842,822
	M6	6	\$97,590	\$585,540	3	\$88,718	\$266,154	3	\$97,590	\$292,770	\$558,924
Total Medics:		58	Cost	\$5,630,205	27			31			\$5,391,876
Total Savings:											\$238,328 (4%)

Note: All Costs shown are 80% of total personnel costs plus 8% overtime allotment.

Data Source: Lacey Fire District 3 and Olympia and Tumwater Fire Departments

More detailed analysis is necessary to quantify the true costs of operating a single medic plus EMT ALS unit. Advanced EMTs with higher level certification could feasibly augment a paramedic in many ALS responses with intermediate life support skills. Nonetheless, this “back of the envelope” calculation suggests that the savings are very modest and must be weighed against the purported benefits of a two paramedic unit.

Recommendation

2.2.1 TC Medic One should continue exploring and testing a supplemental EMS unit configuration as an intermediate to the standard two-paramedic unit. For example, enabling Advanced EMTs to serve the system in more rural fire districts could improve patient outcomes in areas with longer ALS response time intervals.

2.3 Observation: *Every community in the region stands to benefit from being part of the TC Medic One system.*

Several stakeholders posed questions about where the revenue comes from, and where services are delivered, and who benefits. The TC Medic One EMS system deploys ALS resources based on service demands, not property values.

Map 2 shows the approximate amount of revenue collected from the 2012 EMS Levy (\$0.365/\$1,000 assessed value) throughout Thurston County by quarter section (1/4 square mile). The amount of revenue generated depends on individual parcel property values and the density of parcels. The greater the property value or the parcel density, generally the higher the revenue yield per quarter section. The map also shows where ALS service delivery costs exceeded the EMS revenue generated by the receiving quarter section (EMS revenue generated minus the number of incidents at \$1,230 per call). Although every private property owner pays the same levy rate, their neighborhood does not necessarily cover the total costs of ALS responses or transports. There are large clusters and individual quarter sections throughout the county where ALS service delivery costs exceed the locally generated revenue. In reality, costs will vary depending on the nature of the emergency and the distance between the responding unit, the patient, and the hospital.

No single incorporated community or taxing district in the county could provide long-term ALS services from the EMS levy alone - if it were allocated proportionally to each jurisdiction to serve itself. Jurisdictions would require additional revenue such as transport fees or general funds to augment their operating expenses.

2.4 Observation: *TC Medic One staff provides a comprehensive range of administrative and support service functions that strengthen EMS service delivery.*

Thurston County's tiered-response model is typical of communities throughout the U.S., especially in more urbanized metropolitan areas such as King County. What sets TC Medic One apart from its neighboring EMS systems is its comprehensive range of activities that complement and enhance the

delivery of EMS services among all of the system's operators (see Observation 1.6). In comparison, decentralized EMS systems lack this level of support services and coordination.

TC Medic One staff is responsible for ensuring that all of the components of the EMS system operate as a seamless service model. The county's program of integrated medical oversight with training and interagency coordination provides unique strength for a community its size. TC Medic One performs invaluable functions that allow the region's EMS operators to focus on the mission of helping people in need.

TC Medic One staff and the Medical Program Director perform the following key functions that are integral to EMS operations:

1. Performs system administration
2. Manages ALS contracts
3. Conducts system planning and evaluation
4. Engages stakeholders, communities, and organizations
5. Provides direct staff support to the Board of County Commissioners, the Training Advisory Committee, the Operations Committee, the EMS Council and the multi-county West Region EMS and Trauma Care Council
6. Manages the EMS training program and serve as Senior EMS Instructors
7. Administers and monitors all EMS personnel program testing and re-certification processes
8. Administers the On-going Training and Evaluation Program (OTEP)
9. Provides and supports continuing medical education for EMTs and Paramedics
10. Manages in-service training for all paramedics
11. Convenes monthly meetings with the ALS contract agency chiefs and medical officers
12. Performs complete system medical oversight including medical protocol development, training, coordination with regional hospitals/trauma centers, maintaining the security of controlled substances, and the quality inspection, assurance, and counseling of EMS personnel
13. Manages the region's stock medical supplies and procurement of equipment and special needs requests
14. Coordinates with TCOMM 9-1-1 for data management services, dispatch protocols, testing and evaluation of new technologies
15. Coordinates testing and evaluation for the deployment of EMS mobile computer technology
16. Provides direct financial support to augment each agency's EMS services and sponsors an EMS Special Projects Grant process to award funding for priority EMS needs among participating agencies
17. Provides public education and information including CPR training, and support for youth injury prevention programs with Thurston County Safe Kids

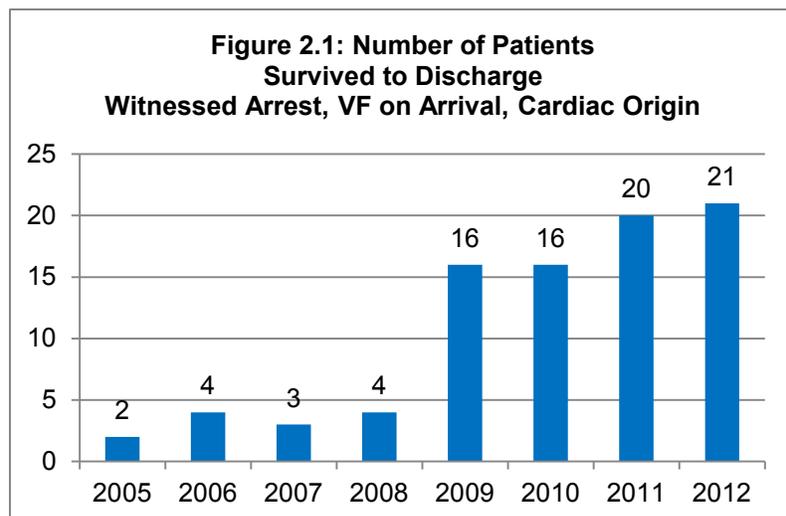
2.5 Observation: *TC Medic One's provision of initial BLS training, continuing education, in-service paramedic training, and EMS quality assurance activities establish a high standard of first responder EMS care throughout the system that improves patient outcomes.*

TC Medic One's training activities and medical oversight program ensures that BLS and ALS services are delivered throughout the county in a consistent manner. By establishing an in-house training program, the Medical Program Director and quality assurance and EMS training staff can collaborate on developing training elements that can improve patient outcomes.

The following example demonstrates the success of TC Medic One's integrated medical oversight and EMS training programs. In December 2008, TC Medic One staff attended the Resuscitation Academy in Seattle. To successfully complete the program, Thurston County was tasked to implement a project to increase survival from cardiac arrest. TC Medic One chose a training and education program emphasizing proper CPR techniques and a quality assurance program that included data and voice recordings for all cardiac arrest events. Staff anticipated that this would significantly (5%) improve the survival rate of witnessed cardiac arrest patients in ventricular fibrillation when compared to a similar pre-intervention time interval.

TC Medic One completed the training project in November 2009 with 97 percent of the EMS providers trained. This project resulted in the system-wide delivery of cardiac treatment that achieved much higher survival rate than predicted. The region's cardiac arrest survival rate increased from 22 percent (average for 2005-2008) to 46 percent (average for 2009-2012).

With the Medical Program Director's involvement, staff provided feedback to each responder for every cardiac arrest. The project improved teamwork at all levels from BLS to ALS. Most importantly, the EMS system saves more lives every year as a result of this training program.



CHALLENGES

2.6 Observation: *The nature of ALS services delivery through contract agencies creates discontent and mistrust among some of the system's stakeholders.*

It is too easy to judge the ALS contract arrangements as a one-sided benefit for the three urban ALS contracting agencies. Given the parameters of a centralized fire-service based EMS system, TC Medic One is responsibly capitalizing on existing resources within the county to manage a service delivery model that attempts to provide fair levels of service across the community. While there is some benefit to Olympia, Tumwater, and Lacey Fire District 3 to have the contracts; the ongoing requirements of providing ALS services countywide carries its own set of challenges. Paramedic personnel management, training, logistics, and occasional heavier than normal call volumes are some of the complexities that the ALS provider agencies must contend with. Would the disagreements over service delivery and contract negotiations dissipate if TC Medic One became a non-fire paramedic ambulance company? Probably not. An entirely new set of problems would likely arise from an alternative model.

It is also too superficial to conclude that there is a rift between the rural and urban agencies, or between those who have ALS contracts and those who don't. Not everyone who was interviewed during this study expressed major problems with the current service delivery model. Most stakeholders spoke favorably of the system. There was no prevailing rural or urban perspective about any system failures.

The nature of this problem is difficult to articulate as there are many layers that contribute to the apparent distrust that has grown between stakeholders over the years. This conundrum won't be solved by a single study. Perhaps some staff, chiefs, and elected officials are hampered by a culture that is resistant to change. Change must come from within the ranks of the fire service to realize that all entities are stronger acting as one team. Subsequently, the public stands to benefit from greater service cooperation and regionalism. Urban fire service agencies and rural fire districts must work together to overcome system problems.

The region's EMS history is colored with stories of expectations that were unfulfilled or contract services that were terminated under less than agreeable conditions to either party. At this point, there is no value in recounting and systematically dissecting, addressing, or reconciling the arguments of opposing views or the disagreements that occurred in the past. The end result is that present and past differences of opinion as to how the region's EMS services should be delivered has strained relations between the system stakeholders. However, EMS service levels have remained intact to the benefit of the community – perhaps this is something participants can agree on.

Thurston County ALS services have trended towards regionalization and consolidation. Over the last decade, TC Medic One has reduced the number of ALS contracting agencies from five to three. A previous study of Thurston County's EMS system (Deborah Hopen Associates Inc., 2003) considered cost savings that could be realized through a single contract provider. TC Medic One should continue exploring the feasibility of this option. The optimum outcome may be to establish a system that provides

truly uniform operational capacity. Under this model, it shouldn't matter who paramedics work for, or where they are, or how they are deployed. The focus is on patient care without the constraints of any jurisdictional operational parameters. The system is fairly close to achieving this model under its current contracts, but differences in each fire service agency's operational parameters and collective bargaining unit agreements still pose challenges to the region's paramedics becoming truly modular assets.

Recommendation

2.6.1 TC Medic One system stakeholders should visit the office of King County Medic One to learn about their system. A series of similar site visits to other neighboring EMS systems could offer local participants with valuable insight as to how Thurston County could improve its system.

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3. System Performance

“The Thurston County Medic One/Emergency Medical Services (EMS) System will provide efficient and effective prehospital emergency medical services (EMS) throughout Thurston County.”

- Mission Statement, Thurston County Medic One

Evaluating how well the system meets its goals is one way to ascertain if the system is accomplishing its mission. EMS system performance is presented in simple traditional measures such as total EMS call volumes, patient transports, average response time intervals, and cardiac arrest survival rates. The public find these measures meaningful and easy to understand. However, they don't fully explain the efficiency and effectiveness of the day to day operations of the system such as finance, administration, training, equipment and supplies, and the full range of emergency medical interventions.

The region's EMS system is a medical program that is part of the larger continuum of health care. Discussions about health care costs have taken center stage in recent years in national, state, and local conversations with the enactment of the Patient Protection and Affordable Care Act. Within this larger context, EMS systems must be able to objectively show their value to the community. The ability to link costs to outcomes and lives saved is becoming essential for everyone to better understand how to maintain and further develop services. However, outcomes are not readily measurable for every patient that accesses the EMS system. For example, the Health Insurance Portability and Accountability Act (HIPAA) restricts access to patients' private health care information. Furthermore, there are countless variables among the full range of medical and trauma incidents that EMS providers encounter, so it is extremely difficult to correlate all pre-hospital emergency medical interventions with patient outcomes.

The identification of measures for assessing system performance is not an easy task for a Medical Program Director, administrators, providers, and policy makers. They must first consider whether the data readily exists or how much it would cost to collect. There are a variety of evidence based performance measures recommended by medical journals that TC Medic One can learn from and determine whether they could add value to this region's unique system.

STRENGTHS

3.1 Observation: *When people dial 9-1-1 for help, the EMS system responds: it saves lives and assists and transports people who are seriously sick or injured.*

Fifteen fire service agencies and seven paramedic units stand ready to deliver BLS and ALS services at all times. In 2012, Thurston County EMS providers responded to over 26,000 EMS calls. Of these, paramedics provided assistance in over 9,300 ALS incidents resulting in over 3,600 ALS patient transports.

The region's EMTs and paramedics respond to hundreds of unique medical conditions and trauma situations from heart attacks to ankle sprains. During the interviews, a few stakeholders expressed

concerns about the overall efficiency of the TC Medic One system, but no one cited a single EMS incident to illustrate the point that the system fails to help people.

Recommendation

3.1.1 Beyond the traditional benchmarking focus on cardiac arrest survival rates and response time interval performance, TC Medic One staff in consultation with the Medical Program Director, should continue considering, evaluating, and implementing other appropriate metrics to measure the system's prehospital emergency medical and trauma care across the entire county.

3.2 Observation: *Three agencies provide ALS service countywide, regardless of what jurisdiction a call comes from. Any upgrade to an existing medic unit or the formation of a new unit, regardless of its principal duty location, is an upgrade to the entire county's EMS system.*

Population density and demographics are the greatest factors that influence EMS service demand. In general, the more populated the community, the greater the call volume. **Map 3** shows 2012 ALS incident demand by quarter section (1/4 square mile). **Map 3B** shows a three dimensional rendering of the data used on Map 3. In 2012, ALS responses were distributed as follows in Thurston County:

- 52 percent occurred within the city limits of Lacey, Olympia, or Tumwater
- 57 percent occurred within all town or city limits
- 73 percent occurred within all urban growth areas (UGAs) and city limits
- 27 percent occurred in unincorporated Thurston County

There are presently seven two-paramedic staffed units operating in the county: Medic 3 and Medic 6 in Lacey; Medic 4 and Medic 10 in Olympia; Medic 5 in Tumwater; Medic 2 in Yelm; and Medic 14 in Grand Mound. Six of the units presently provide 24 hour service (Medic 6 will be upgraded from a 12-hour unit to a 24-hour unit in July 2013). In general, each medic unit is assigned to provide primary coverage to a geographic area, referred to as a medic zone. For example, Medic 10 is staffed by the Olympia Fire Department and is stationed in the west side of Olympia. Medic 10's area of operation includes the west side of the City of Olympia and the McLane, Black Lake, and Griffin Fire Districts. However Medic 10 or any other unit will respond anywhere in the county depending on system-wide service demands and the closest available unit.

Map 4 shows which medic units responded to ALS incidents in 2012. All units are currently well positioned in proximity to the center mass of their zone's incident locations. In 2012, units responded within their assigned zones for 75 percent of their incidents on average (see Table 3.1). As the map shows, any ALS unit can be dispatched to locations far outside their primary zone of operations to provide redundant ALS services as necessary.

Table 3.1: Portion of 2012 ALS Responses in Medic Zones

Unit	Primary Medic Zone	
	Percent In	Percent Out
Medic 2	87.8%	12.2%
Medic 3	71.5%	28.5%
Medic 4	67.5%	32.5%
Medic 5	73.3%	26.7%
Medic 6*	74.4%	25.6%
Medic 10	71.0%	29.0%
Medic 14*	94.0%	6.0%
Countywide Total	74.7%	25.3%

*M6 was a 12 hour unit from 2009 to 2012. The full impact of its upgrade will not be known until after July 2013.

*M14 includes SPRINT 14 data. M14 wasn't fully upgraded in 2012.

3.3 Observation: *The system currently has ample response capacity to fulfill ALS service demands for the next several years.*

TC Medic One appears to have sufficient response capacity to meet service demands for the next several years. The region has approximately one ALS unit per 36,600 residents (2011 population 256,591). In comparison, King County Medic One has one ALS unit per 75,790 residents (26 units for 1.97 million residents).

Between 2009 and 2012, Medic 3 and Medic 4, the units closest to Providence St. Peter Hospital, collectively responded to nearly 41 percent of all ALS incidents in Thurston County. Medic 2 and Medic 14 (SPRINT 14 before 2012), responded to less than half as many calls (see Table3.2).

Medic 3 and Medic 4 both average a little more than four responses per day. Most days (over 87%) have six or fewer incidents. In comparison, King County Medic One's most urban medic units average seven calls per day. Medic 3, the region's busiest unit only handles seven or more calls per day about 13 percent of the year. Medic 2 and Medic 14, the most rural units, average around two calls per day. Overall, 110 out of 2,555 medic unit days (7 units x 365 days) experienced zero ALS incidents (4 percent) in 2012 (see Table3.3).

Note: The region's medic unit call volume variability stresses the importance of rotational staff schedules to ensure that all paramedics experience similar call volume loads and patient contacts to maintain ALS skills proficiency.

Table 3.2: Total ALS Incidents by Medic Unit, 2009-2012

Medic Unit	Total ALS Incidents				2009-2012	2012	2009-2012
	2009	2010	2011	2012	Total	%Incidents	%Incidents
M2	898	921	876	893	3588	10.7%	11.0%
M3	1815	1798	1811	1593	7017	19.0%	21.5%
M4	1574	1602	1533	1549	6258	18.5%	19.1%
M5	1340	1244	1243	1317	5144	15.7%	15.7%
M6*	801	739	746	969	3255	11.6%	10.0%
M10	1059	1184	1165	1375	4783	16.4%	14.6%
SP14	491	352	199	103	1145	1.2%	4.6%
M14*	179	351	410	567	1507	6.8%	3.5%
Grand Total	8157	8191	7983	8366	32697	100.0%	100.0%

Source: TC Medic One. Data tabulated by TRPC

Note: TRPC filtered incidents for reaction time 0 to 360 seconds and response time 0 to 3600 seconds.

*M6 was a 12 hour unit from 2009 to 2012. The full impact of its upgrade will not be known until after October 2013.

*M14 was phased in as a full time unit throughout 2012.

Table 3.3: 2012 Daily ALS Unit Response Volumes and Statistics

	Medic Units							
	M2	M3	M4	M5	M6	M10	M14*	
Total Response Days	343	362	362	352	329	353	344	
Zero Response Days	6.0%	0.8%	0.8%	3.6%	9.9%	3.3%	5.8%	
1-2 Calls Per Day	51.8%	16.2%	17.5%	25.8%	40.3%	23.8%	68.5%	
3-4 Calls Per Day	33.2%	38.9%	41.4%	42.2%	35.3%	40.5%	23.0%	
5-6 Calls Per Day	7.9%	31.0%	29.0%	21.1%	12.3%	24.9%	2.5%	
7+ Responses Per Day	1.1%	13.2%	11.2%	7.4%	2.2%	7.4%	0.3%	
Total Responses	893	1593	1549	1317	969	1375	670	
Average Daily Responses	2.4	4.4	4.2	3.6	2.7	3.8	1.8	
Maximum Daily Responses	10	13	13	13	11	10	7	

Source: TC Medic One.

Note: TRPC filtered incidents for reaction time 0 to 360 seconds and response time 0 to 3600 seconds.

*M6 was a 12 hour unit from 2009 to 2012. The full impact of its upgrade will not be known until after October 2013.

*M14 includes SPRINT 14 data. M14 wasn't fully upgraded in 2012.

Table 3.4: Total ALS Incidents Locations by Fire Service Agency, 2009-2012

Agency	Total ALS Incidents				2009-2012	2009-2012 %Incidents
	2009	2010	2011	2012		
Bucoda Fire Department	31	42	24	40	137	0.4%
FD #1 - Rochester	647	592	456	466	2,161	6.6%
FD #11 - Littlerock	299	272	263	298	1,132	3.5%
FD #12 - Tenino	269	278	219	193	959	2.9%
FD #13 - Griffin	63	75	82	102	322	1.0%
FD #16 - Gibson Valley	17	9	14	15	55	0.2%
FD #17 - Bald Hills	89	112	73	95	369	1.1%
FD #2 - Yelm	688	646	660	661	2,655	8.1%
FD #3 - Lacey	2,569	2,510	2,515	2,636	10,230	31.3%
FD #4 - Rainier	123	147	165	142	577	1.8%
FD #6 - East Olympia	249	214	227	247	937	2.9%
FD #7 - North Olympia	65	73	60	89	287	0.9%
FD #8 - South Bay	138	144	149	170	601	1.8%
FD #9 - Black Lake	125	131	101	126	483	1.5%
FD #9 - McLane	152	185	147	153	637	1.9%
Olympia Fire Department	1,957	2,049	2,060	2,121	8,187	25.0%
Tumwater Fire Department	676	712	768	812	2,968	9.1%
Grand Total	8,157	8,191	7,983	8,366	32,697	100.0%

Source: TC Medic One.

Note: TRPC filtered incidents for reaction time 0 to 360 seconds and response time 0 to 3600 seconds.

3.4 Observation: *ALS response time intervals are well within the State's and TC Medic One's adopted level of service goals countywide.*

The amount of time it takes for an EMS unit to travel the scene of an emergency is one of the most critical factors in successful patient outcomes. This measure is known as a response time interval, and is perhaps the most widely used and well-understood metric to assess the performance of an EMS system. Thurston County's system is within its response time interval compliance goals throughout the county.

Thurston County's ALS response time level of service is better than the minimum thresholds established by Washington State. The state specifies minimum agency response time requirements for EMS calls and trauma based on population size and density. WAC 246-976-010 provides the following definitions for the response area classifications:

"Urban"

- a. An incorporated area over thirty thousand; or
- b. An incorporated or unincorporated area of at least ten thousand people and a population density over two thousand people per square mile.

"Suburban"

- a. An incorporated or unincorporated area with a population of ten thousand to twenty-nine thousand nine hundred ninety-nine; or
- b. Any area with a population density of between one thousand and two thousand people per square mile.

"Rural"

- a. An unincorporated or incorporated area with a total population of less than ten thousand people, or with a population density of less than one thousand people per square mile.

"Wilderness"

- a. Any rural area not readily accessible by public or private maintained road.

Thurston County’s ALS response time service goal provides a better rural level of service goal, 30 minutes, compared to the State’s 45 minutes.

Table 3.5: Washington State EMS and Trauma Response Time Requirements vs. Thurston County ALS Response Time Service Goals

Response Area Classification	Washington State	Thurston County
Urban	10 minutes or less, 80% of responses	Same
Suburban	20 minutes or less, 80% of responses	Same
Rural	45 minutes or less, 80% of responses	30 minutes or less, 80% of responses
Wilderness	As soon as possible	Same

TC Medic One’s Review Evaluation and Design (RED) Committee, a subcommittee of the Operations Committee, determined the response area classification for all cities, Urban Growth Areas (UGA), and fire districts in Thurston County based on the state’s criteria, using 2010 U.S. Census population data. Every response area in the county exceeds TC Medic One’s response time level of service goal. The table below shows each community’s response classification and their response time compliance rating (the portion of calls at or below the minimum time requirement).

Table 3.6: TC Medic One 2012 ALS Response Time Compliance

Classification	Response Area	Compliance Rate	Mean Response Time
Urban 10 mins. or less 80%	Olympia & UGA	93%	5:07
	Lacey & UGA	92%	6:00
	Tumwater City Limits	92%	5:25
Suburban 20 mins. or less 80%	Tumwater UGA	96%	8:31
	FD 1, Rochester	97%	7:19
	Yelm and UGA	98%	6:53
	City of Rainier	96%	10:37
	FD 3, Lacey (u)	96%	9:27
	FD 6, East Olympia	93%	11:21
	FD 9, McLane	90%	11:36
	FD 11, Littlerock	95%	12:41
	Tenino and UGA	100%	12:54
	Bucoda	100%	15:40
Rural 30 mins. or less 80%	FD 2, Yelm (u)	91%	10:23
	FD 4, Rainier (u)	100%	12:29
	FD 5, Black Lake	99%	11:19
	FD 7, North Olympia	100%	12:03
	FD 8, South Bay	99%	10:03
	FD 12, Tenino (u)	97%	13:47
	FD 13, Griffin	100%	14:35
	FD 16, Gibson Valley	100%	15:40
	FD 17, Bald Hills	89%	20:09
Wilderness ASAP	Portions of JBLM, Capital Forest, Private Forest Lands, etc.	N/A	Not Calculated

Source: TC Medic One 2012 Business Plan

Note: (u)=unincorporated areas; Mean response time shown as minutes: seconds

TRPC performed an independent analysis of the region's ALS incident response time intervals using TCOMM 9-1-1 data supplied by TC Medic One. Using a geographical information system (GIS), TRPC calculated average response times for every fire service agency jurisdiction. Over a four-year period (2009 through 2012), six of the fire service jurisdictions' mean ALS response times achieved urban level of service. Countywide, the region achieved a response time slightly below seven and a half minutes (see Table 3.7).

Table 3.7: Thurston County Mean ALS Response Time Intervals by Fire Service Agency Jurisdictions, 2009-2012

Agency	Average ALS Response Time Interval in Minutes				
	2009	2010	2011	2012	2009-2012
FD #1 - Rochester ¹	9.90	9.80	8.67	8.42	9.29
FD #11 - Littlerock ¹	11.16	11.97	10.45	11.77	11.35
FD #12 - Tenino	12.56	13.16	13.38	12.87	12.98
FD #13 - Griffin	15.30	14.75	15.06	13.69	14.60
FD #16 - Gibson Valley	20.50	16.58	18.95	18.65	18.96
FD #17 - Bald Hills	19.77	19.20	20.20	20.14	19.78
FD #2 - Yelm ²	8.16	7.84	8.36	8.07	8.11
FD #3 - Lacey	6.60	6.85	6.53	6.50	6.62
FD #4 - Rainier ²	12.37	12.19	12.62	11.39	12.15
FD #6 - East Olympia	9.12	9.36	9.93	11.34	9.95
FD #7 - North Olympia	12.33	12.00	11.48	12.06	11.99
FD #8 - South Bay	10.40	11.10	9.63	9.48	10.12
FD #9 - Black Lake	10.01	10.62	10.46	10.08	10.29
FD #9 - McLane	9.78	9.11	10.60	10.40	9.92
Bucoda Fire Department	15.97	16.59	17.19	15.25	16.16
Olympia Fire Department	5.06	5.09	5.13	4.78	5.01
Tumwater Fire Department	5.18	5.47	5.22	5.38	5.32
Countywide	7.53	7.66	7.34	7.30	7.46

Source: TCOMM 9-1-1

Note: Data filtered for reaction time between 0 and 360 seconds and response time between 0 and 3600 seconds; ¹ West Thurston Regional Fire Authority; ² SE Thurston Regional Fire Authority

The more remote a person lives from an EMS unit station, the longer the response time. This is perhaps a hard truth for some people to accept. However, the public deserves a more granular picture of expected EMS service levels than city-wide, fire district-wide, or countywide average response times can convey. An 80 percent or 90 percent response time compliance report is very helpful to system operators for evaluating aggregate operational performance within a service area, but it doesn't provide geographic-focused results to a neighborhood or individual property owner.

Map 5 shows 2012 mean ALS response times by quarter section (1/4 square mile). In 2012, medics responded to calls within nearly 252 miles or 34 percent of Thurston County's 736 square miles. More than half (138 miles²) of the area served by paramedics received mean response times of 10 minutes or less; 84.5 miles² or 34 percent of the area served received 11 to 20 minute mean response times; and only 9.5 miles² or four percent of the area served experienced mean response times over 21 minutes.

Using South Bay Fire Department as an example, consider how residents might interpret ALS response time performance between district-wide response time intervals compared to a higher resolution map. The district is subject to a rural classification goal for medics to perform 80 percent of ALS responses in 30 minutes or less. Some residents may readily misinterpret this to mean it could take medics up to 30 minutes to respond to their emergency. Likewise, a resident near Johnson Point shouldn't develop false expectations about a seven and a half minute response time based on the countywide mean value, nor should someone living near 26th Ave NE at the south end of the district fret over a 10.12 minute response time as shown in the table above. In fact, response times are longer or shorter depending on any given location within the district. In fact, of the 13.5 miles² that received ALS service in South Bay Fire District in 2012, over half of the area served received mean response times of 10 minutes or less. Residents living near Johnson Point could expect average response times from 11 to 22 minutes, depending on the accessibility of a property from Johnson Point Road.

Data displayed at the level of detail shown on Map 5 conveys probable system performance in a context that community members can relate to. Presenting neighborhood level of detail is not an insurmountable task and it can provide residents useful information to better prepare themselves in the event they ever require emergency services.

Recommendation

3.4.1 TC County Medic One has quality response time data that should be presented, when appropriate, in a format that is accessible and readily understood by a broader audience.

CHALLENGES

3.5 Observation: *More work is necessary to standardize the capture, retrieval, and dissemination of EMS data throughout the system, particularly for BLS response activity data.*

TRPC requested BLS incident data from TC Medic One to perform an independent analysis of BLS call volumes, location, and response time intervals to develop a countywide geographic operational perspective of BLS service demands. The data was not readily available and retrieving the data from TCOMM 9-1-1's database proved difficult for TC Medic One staff. A separate request for BLS data by age cohort was made during an Operations Committee meeting. Lacey Fire District 3 and Olympia Fire Department both attempted to fulfill the request, but it became immediately apparent that each agency's output was incompatible and presented discrepancies when compared with TC Medic One's EMS data.

Each fire service agency has unique data needs and data management systems. While standard sets of data can be compared across jurisdictions, the extent of compatibility between data management systems and their output appears very limited. A countywide analysis of EMS service projections is

hampered without the ability to disseminate specific attributes of the BLS data consistently across the system.

Recommendations

3.5.1 TC Medic One should take a lead role to foster greater EMS data interoperability and information exchange.

3.5.2 TC Medic One should coordinate with fire service agencies to develop agreed upon comprehensive EMS service demand projections for system planning.

4. Governance

The Thurston County EMS system is comprised of multiple providers. Each provider is a participant in the system and is a unique political subdivision or organization with their own resources, needs, and service expectations. The principal participants are: Thurston County, the cities, fire districts, private ambulance companies, the hospitals, and TCOMM 9-1-1.

With so many participants, it can be very challenging at times for EMS stakeholders in the Thurston County region to reach consensus on key decisions. Nevertheless, the public expects that those responsible for making decisions will do so for the greater good of public safety and in a transparent fashion.

NFPA 450 Guide for Emergency Medical Services and Systems provides the following succinct guidance for participant roles:

The roles and responsibilities for each participant should be organized in a manner that ensures that every component of the system contributes to the effectiveness of the system as a whole, without conflicts in roles and responsibilities.

RCW 36.01.100 gives counties in Washington the authority to establish or award contracts for the provision of countywide ambulance service as long as it does not compete with an existing private system. TC Medic One is the lead agency for the administration, coordination, and medical oversight of the county's EMS system, but the Board of Thurston County Commissioners is the legislative authority over the provision of the EMS services funded by the EMS levy.

The Thurston County EMS system is relatively young in the history of public service programs. Forty years ago, on December 17, 1973, the County Commissioners appointed an Emergency Medical Services Advisory Board for the "purpose of providing input on the development, design and operation of an Emergency Medical Services program necessary for the health and welfare of the citizens of Thurston County in emergency situations..."

On January 16, 1979 the County Commissioners adopted Resolution 6131 to rename the Emergency Medical Services Advisory Board to the Emergency Medical Services Systems Council. The resolution clarified the advisory role of the council to, "...determine, develop and recommend emergency medical service programs to the Board of Thurston County Commissioners as essential to the continued successful operation of the Emergency Medical Services (Medic I) program..."

Thurston County Resolution 14214 amended the Emergency Medical Services Council (EMS Council) Bylaws to their current form on April 7, 2009 (Appendix B). The EMS Council has many responsibilities, however their principal role is to advise the Thurston County Commissioners regarding the development, policies, and planning for the system.

STRENGTHS

4.1 Observation: *Policy makers, staff, and stakeholders care about the system.*

Every stakeholder interviewed for this report expressed a sincere desire to work with others and displayed a genuine concern for the long-term viability of the region's EMS system. It is very clear that the EMS Council members care as much about the region's system as they do about their own jurisdiction.

CHALLENGES

4.2 Observation: *Some EMS Council members have expressed feelings of mistrust, frustration, and dissatisfaction over recent decision making processes of the TC Medic One system.*

The TC Medic One System does have deliberative processes, subcommittees, and staff to support the EMS Council. However, several stakeholders expressed some disappointment in the inability of the EMS Council to effectively work together to solve system problems. These viewpoints represented both urban and rural representation both on and off the EMS Council. The stakeholders expressed concern not only about certain decisions, but also about how decisions are made. When discussing system governance, members share they:

- Feel like their concerns are not adequately addressed by the process
- Sometimes have difficulty setting aside their 'local' position in a regional context
- Feel that they don't have enough time to discuss issues with their peers and constituents before decisions are made
- Sometimes feel like they don't have ownership of the issues and are rubber stamping staff driven processes

The EMS Council must supply leadership to "provide efficient and effective prehospital emergency medical services throughout Thurston County." This report contains several challenges that the EMS Council must respond to at some level. If the EMS Council cannot overcome the challenge described above, it will struggle with fulfilling its mission. Worse, disgruntled representatives could generate doubt and lack of confidence in the system among some voting districts.

It is virtually impossible to solve big or complex problems like those of an EMS system without having adverse effects on at least some interests. It is normal to debate, feel passionate about an issue, disagree, and even cast an oppositional vote. However, after a decision is made, all members should feel that their concerns were heard, understood, and the process was fair so everyone can effectively move on to the next challenge.

Below are suggestions the EMS Council should consistently apply to their setting to help improve the governing process.

1. Collectively the Council must accept ownership of the roles and duties delegated by the County Commissioners specified in the Bylaws.
 - a. Convene an occasional retreat or work session to establish priorities, set agendas, and devote time learn one another's strengths and abilities
 - b. Respectfully delegate staff to fulfill the policy direction of the system
 - c. Hold staff accountable for implementing system policies

2. Establish meeting norms. Each member must:
 - a. Act in good faith
 - b. Attend meetings regularly or send an alternate
 - c. Come prepared
 - d. Contribute
 - e. Always listen to others and respect their contributions
 - f. Represent constituent interests – not personal interests
 - g. Report back to constituents regularly and in a timely fashion

3. Enforce decorum. The Chair should ensure that members and meeting attendees adhere to rules of order:
 - a. Follow Robert's Rules of Order
 - b. Only members or their alternates, or invited presenters should be permitted to sit at the table and participate in the business of the Council
 - c. Audience members should be welcomed, but invited to sit with other audience members. Their participation should be limited to the public comment portion of the agenda, unless granted permission to participate by a decision from the Council
 - d. During EMS Council meetings, non-voting committee chair members should only represent their committee, not confer with their agency's EMS Council representative

4. Make the meetings interesting and rewarding
 - a. Keep members engaged by occasionally using a different meeting venue
 - b. Invite outside speakers to present relevant topics
 - c. Recognize individual contributions and achievements of everyone who participates in the system

Recommendation

4.2.1 The EMS Council should identify deliberate activities to foster trust among members, learn each other's strengths, and celebrate the Council's successes.

4.3 Observation: *Rural stakeholders have expressed frustration that the composition of the EMS Council is biased toward the urban communities.*

There is a prevalent perception among some rural stakeholders that the council membership is weighted in favor of the urban communities. Depending on how one categorizes the orientation of members at any given time, this may be true, but it is not the most relevant factor contributing to the Council's problems identified in Observation 4.1.

Three citizen at large appointees and three rural fire district fire commissioners constitute six of the 11 voting members. These six members could supply a majority opposition to a vote that could be perceived as favorable to the urban communities. It is conceivable that the County Commissioners may not follow the advisory vote of the EMS Council for any given issue rendering the problem of rural vs. urban votes a moot point.

The County Commissioners are responsible for the final vote in approving the ALS contracts or TC Medic One's Budget, but they count on the EMS Council to thoughtfully address all EMS system issues with a good faith effort to provide them with representative informed advice.

The Bylaws are clear about the role and scope of the Council. All of its members must first and foremost focus their deliberations on the function of the overall system, not the organization they represent. While it is difficult to set aside local concerns, members should use a "regional lens" to evaluate and improve the system. Urban communities should understand the needs of rural agencies and rural agencies must do the same for urban communities.

The Council could amend the Bylaws to modify membership. More members aren't necessarily better, but having diverse representation at the table is likely to raise issues or concerns that might otherwise go unnoticed by the EMS system. This could help to build understanding and trust among the system stakeholders and users.

Every town or city has some form of direct representation on the EMS Council except the City of Lacey. The cities of Yelm, Rainier, Tenino, and Bucoda are represented by an appointee of the South County Mayors. The cities of Tumwater and Olympia are represented because they are an ALS contracting agency. Lacey historically had a seat when it contracted with Lacey Fire District 3 for fire and ALS services. When Lacey was annexed by Lacey Fire District 3, the city lost its membership on the Council as it no longer fit the membership criteria specified in the bylaws. One could argue that Lacey is represented by Lacey Fire District 3, but this may not be satisfactory to the city. Between 2009 and 2012, the City of Lacey generated 17 percent of the ALS calls in the region. When combined with its urban growth area, it accounts for over 27 percent of all ALS calls. Its portion of BLS call volumes is likely higher. As Lacey annexes its urban growth areas, it will become the largest and most populous city in Thurston County. Once a city reaches a population of 50,000, it gains veto authority to control whether a countywide EMS levy can go on a ballot. Clearly, the City of Lacey is a major system stakeholder that presently lacks adequate representation.

The EMS membership specifies that at least one of the citizen-at-large appointees shall be a physician. This member can offer medical knowledge and perspective to the EMS Council. He or she can also serve as a sounding board to the Medical Program Director. This is a useful addition, but to date only one medical doctor has continuously served in this capacity. When the current physician-appointee chooses to resign, the Thurston County Commissioners may face a challenge with rearranging the citizen appointments to fill one of three positions with a physician. To overcome this potential problem, a fourth citizen-at-large position should be established exclusively for a physician, who could be appointed from any County Commissioner District.

Rural constituents are represented by the rural fire district commissioners and the single County Commissioner, but of the three Citizen-at-Large positions, none are actually from more distant rural communities in the County. The EMS Council could benefit having a member who is a resident from a remote area of the region such as Bald Hills, Steamboat Island, or Gibson Valley. A resident who lives in a community that experiences average ALS response times of 15 to 20 minutes or more could provide invaluable perspective as well as serve as an ambassador for the EMS system to rural residents.

Recommendation

4.3.1 The EMS Council should review Article IV. Composition and Membership of the Bylaws to consider amending the membership to:

- 1. Include the City of Lacey**
- 2. Add a fourth Citizen-at-Large Physician to eliminate potential appointment conflicts with existing Citizen-at-Large members**

4.3.2 Encourage Thurston County Commissioners to expand Citizen-at-Large outreach efforts to fill positions with members from rural county communities.

4.4 Observation: *Information about the proceedings of the EMS Council is not readily available to the public.*

The public does not have easy access to information about the business proceedings of TC Medic One. If someone wanted to learn more about the EMS Council, they would need to contact someone at TC Medic One's office or inquire in person, via phone, or email. This information should be posted online to improve public access and reduce the need for staff to respond via other traditional information sharing methods.

Recommendation

4.4.1 TC Medic One staff should post and update the following content on its website in an easily accessible format: EMS Council meeting schedule, a list of EMS Council members, meeting agendas, minutes, TC Medic One Budget, and EMS Council Bylaws.

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5. Planning

People interviewed during the study expressed uncertainty about the mission and scope of the TC Medic One system. They challenged its dual role as an ALS and BLS system. Some individuals believe the scope of TC Medic One and its evolution as an EMS system was perhaps influenced more by spontaneous political persuasion than a deliberate and systematic evaluation of the region's needs. These concerns arose from both urban municipal fire service agencies and rural fire districts. According to some stakeholders' observations, TC Medic One's previous scope was principally focused on ALS services. Some believe the current level of financial support of BLS services with the EMS levy will result in the "Death of Medic One." Others express that TC Medic One allocates a disproportionate share of resources to ALS when the greater volume of EMS demand is served by BLS services.

TC Medic One's mission statement, values, and goals are very clear about identifying its role as an EMS system that serves both ALS and BLS. The region's system is as comprehensive an EMS system that one might find anywhere in the nation. When Thurston County asks voters to approve an EMS levy lid lift, staff and policy makers must be ready to respond to the people's concerns over rising system expenditures and how the system will balance system demands with the resources available.

NFPA 450, Guide for Emergency Medical Services and Systems, Section 5.1.1 provides the following guidance for EMS system analysis and planning:

As specified in "Emergency Medical Services: Agenda for the Future": "Before creating an EMS system or implementing any EMS system design changes a community should conduct a comprehensive community analysis that considers available resources, customers, geography, demographics, political conditions, and other unique and special needs of the system. This analysis should focus on these areas, identifying their potential impact on the effectiveness of EMS system components including human resources, medical direction, legislation and regulation, education systems, public education, training, communications, transportation, prevention, public access, communications systems, clinical care, information systems (data collection), and evaluation." (Delbridge et al.)

TC Medic One doesn't have to start from scratch to design and plan for the long-term needs of the system. With nearly 40 years' experience providing countywide EMS services, the region has a significant amount of knowledge to apply to planning for the future. The future will bring changes. What changes, and how much change is difficult to predict. Nonetheless, the EMS system must consider how the region's future population and its needs will affect EMS service levels.

The Washington State Growth Management Act (GMA) does not require any specific emergency medical service planning to be considered in response to population growth, or to be included in cities' and counties' comprehensive plans, but it is prudent to do so. Under the GMA, counties have the responsibility for what forecasts will be used locally. The Act requires consultation among the local jurisdictions before action. In their Countywide Planning Policies, Thurston County delegated the review and approval of the population forecasts to TRPC.

Population density and demographics are key factors that influence EMS service demand. Thurston County's population forecast projects a countywide population increase of approximately 47 percent between 2010 and 2035 or 370,589 residents (see Table 5.1). During the last four years (2009-2012), average annual EMS population utility rates (the portion of the population that accesses EMS) grew an average of 9.8 percent per year, compared to 8.9 percent between 1993 and 2012. Using a 9.8 percent average annual EMS utility rate, EMS volumes may increase approximately 51 percent by 2035 or 36,457 calls per year. This is approximately 12,300 more calls than the system responded to in 2010 (see Table 5.1 and Figure 5.1).

In 2010, paramedics responded to 8,308 ALS incidents. Using TRPC's five year age cohort population forecast figures to calculate ALS utilization rates, TRPC estimates that the total number of ALS incidents will increase by 63 percent or nearly 13,600 between 2010 and 2035. TC Medic One will respond to nearly 5,300 more ALS incidents in 2035 than 2010 (about 15 additional calls a day). Of the 13,600 projected ALS incidents in 2040, 57 percent will be for people aged 65 and older. This is nearly a 116 percent rise in projected call volume growth for this age group. In comparison, the number of ALS incidents for people aged 64 or younger is projected to only increase by 23 percent during the same period (see Table 5.2 and Figure 5.2).

Over half of future EMS service demand will come from people aged 65 or older. A significant portion of the system's resources will be used caring for geriatric patients. Growth in this age group may not come as a surprise to EMS providers, but where these calls come from matters most. Nursing homes, assisted living centers, senior housing, and casinos are high volume EMS incident generators. These locations will continue to provide the bulk of calls for this age group, however many people are aging in place and staying active longer. EMS calls from this age cohort may become more geographically dispersed in the communities, with countywide single-family-residences becoming more frequent elderly ALS response locations.

The 2010 to 2035 population forecast shows the majority of new growth occurring in Lacey Fire District 3, Olympia, Tumwater, and in South East and West Thurston Regional Fire Authorities. Combined, these agencies account for nearly 80 percent of the forecast allocations by 2035 (see Table 5.3). These same agencies accounted for nearly 85 percent of the ALS call volume between 2009 and 2012 (see Table 3.4). Logically, the majority of the EMS call volumes will originate from these jurisdictions over the next 22 years.

**Table 5.1: Population Forecast Allocations,
Thurston County Cities and UGAs
2010-2035**

Jurisdiction		Forecast					
		2010	2015	2020	2025	2030	2035
Bucoda	Total	560	570	575	675	890	1,065
Lacey	City	42,400	45,370	49,360	50,850	52,160	53,090
	UGA	33,140	34,280	39,250	44,150	49,350	54,630
	Total	75,540	79,660	88,610	94,990	101,510	107,720
Olympia	City	46,510	49,550	54,610	60,130	64,980	67,730
	UGA	11,800	12,270	13,240	13,900	14,960	16,670
	Total	58,310	61,820	67,850	74,030	79,940	84,400
Rainier	City	1,795	1,920	2,035	2,175	2,480	2,660
	UGA	110	110	110	135	360	485
	Total	1,905	2,030	2,145	2,310	2,840	3,150
Tenino	City	1,695	1,710	1,745	2,010	2,670	3,095
	UGA	15	15	15	25	80	90
	Total	1,710	1,725	1,760	2,030	2,750	3,190
Tumwater	City	17,330	19,290	22,930	25,800	28,440	30,090
	UGA	6,020	6,540	7,920	9,830	11,720	12,790
	Total	23,350	25,830	30,840	35,620	40,160	42,880
Yelm	City	6,775	8,260	12,570	16,985	19,910	21,975
	UGA	1,425	1,425	1,480	1,610	2,545	4,305
	Total	8,200	9,685	14,050	18,595	22,455	26,285
Grand Mound UGA	Total	1,345	1,275	1,465	1,630	1,775	1,885
Chehalis Reservation ²	Total	70	75	90	105	125	160
Nisqually Reservation ²	Total	595	750	985	1,035	1,070	1,120
Total Cities		117,070	126,680	143,820	158,620	171,530	179,710
Total UGAs¹		53,850	55,920	63,480	71,270	80,790	90,860
Total Reservations²		665	825	1,070	1,145	1,200	1,280
Rural Unincorporated County³		80,680	83,030	87,500	91,130	95,030	98,740
Thurston County Total		252,300	266,500	295,900	322,200	348,600	370,600

Sources: Thurston Regional Planning Council Population and Employment Forecast 2012.

Table 5.2: Projected Thurston County ALS Incidents by Age Cohort, 2010-2035

Age	Mean Annual Utilization		Actual	ALS				
	Incidents	Rate	Incidents	Projected Incidents				
	2008-12	2010	2010	2015	2020	2025	2030	2035
0-4	147	0.01	127	148	159	169	179	189
5-9	64	0.00	72	69	75	80	85	89
10-14	89	0.01	95	93	105	113	120	127
15-19	215	0.01	231	223	247	273	295	312
20-24	271	0.02	322	273	300	326	357	382
25-29	256	0.01	297	246	273	284	309	333
30-34	255	0.02	277	268	288	310	318	344
35-39	309	0.02	296	338	384	408	436	444
40-44	391	0.02	469	401	454	509	544	577
45-49	481	0.03	464	481	510	565	633	675
50-54	570	0.03	562	569	582	609	670	748
55-59	632	0.03	685	645	663	671	698	764
60-64	648	0.04	689	717	763	784	790	818
65-69	642	0.06	642	853	986	1,057	1,093	1,095
70-74	583	0.08	598	792	1,091	1,262	1,369	1,420
75-79	605	0.11	682	687	957	1,313	1,532	1,680
80-84	674	0.15	669	681	805	1,107	1,529	1,799
85+	999	0.22	1008	1,070	1,168	1,346	1,752	1,778
Total	8,012		8308	8,551	9,810	11,187	12,709	13,573
Percent Change, All Ages Since 2010				2.9%	18.1%	34.6%	53.0%	63.4%
Summary, People 65 +			3,599	4,083	5,006	6,084	7,274	7,771
Percent Change Since 2010			N/A	13.4%	39.1%	69.0%	102.1%	115.9%
Portion of Total Incidents, 65+			43.3%	47.7%	51.0%	54.4%	57.2%	57.3%

Source: TRPC - Population and Employment Forecast Work Program, 2012. ALS data from TC Medic One

Figure 5.1: Historic and Forecast Thurston County EMS Call Volumes and Population, 1990 to 2035

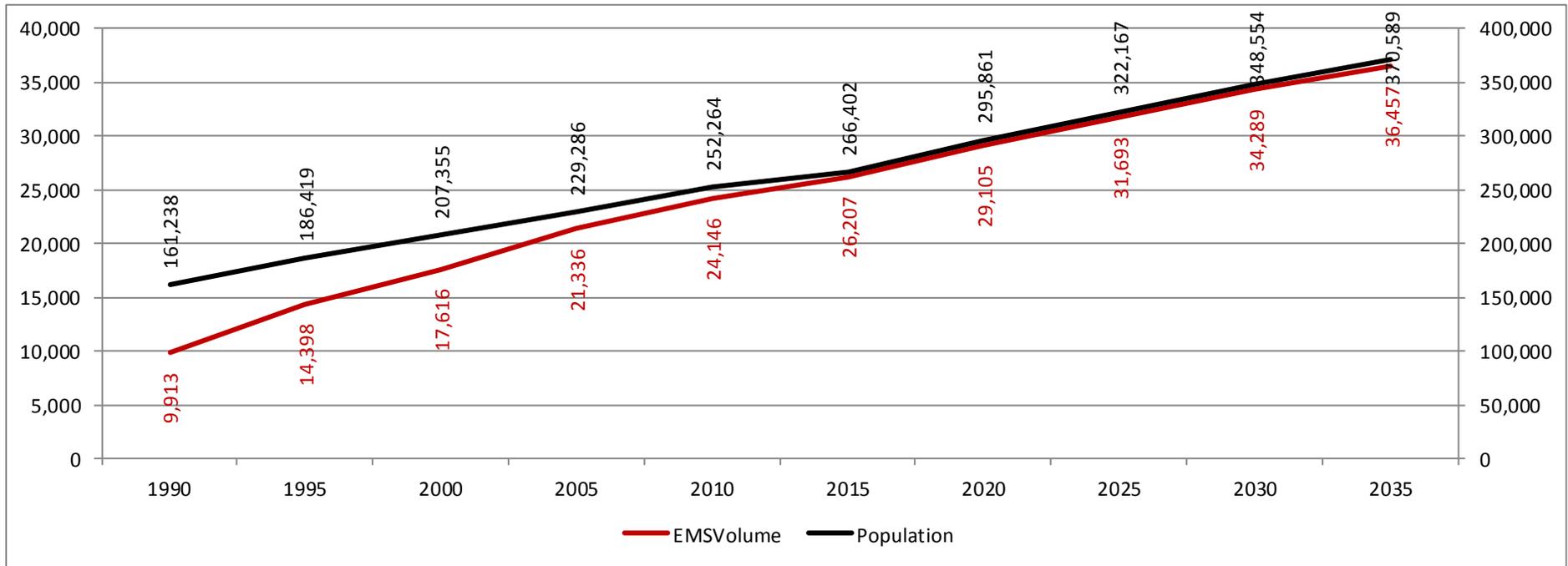
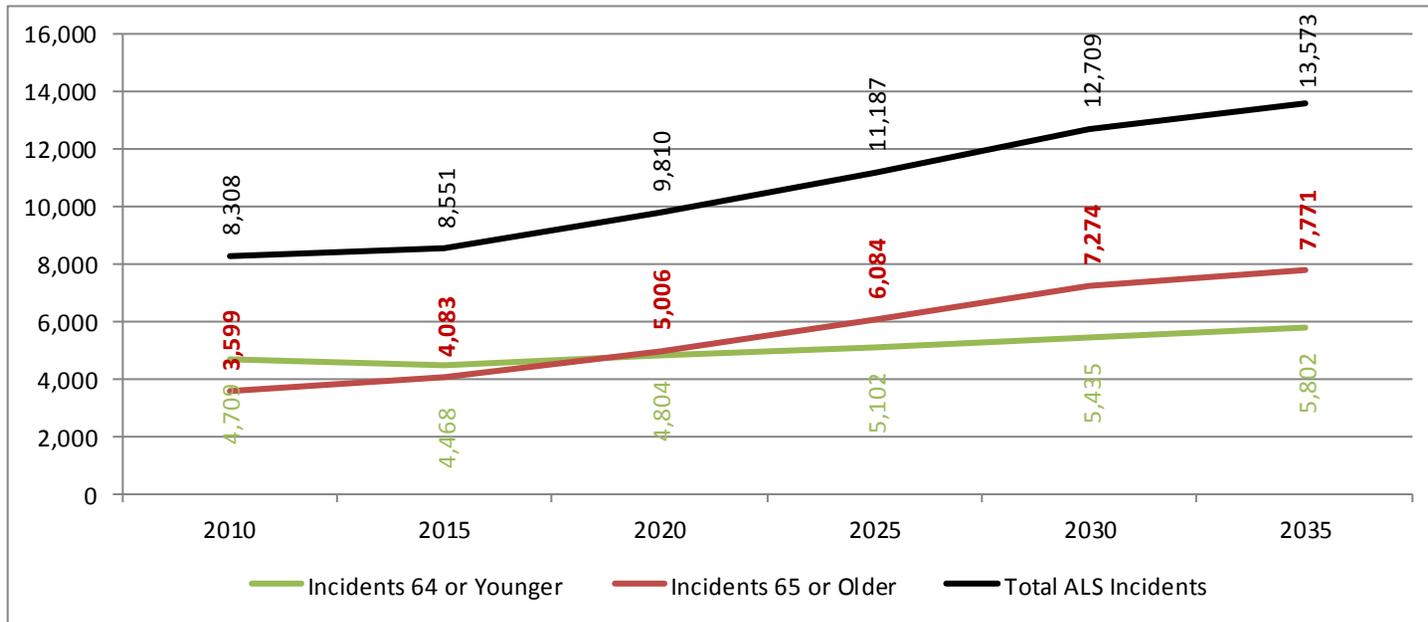


Figure 5.2: Forecast Thurston County ALS Incidents, 2010 to 2035



**Table 5.3: Population Estimate and Forecast by Fire District, Thurston County
2010-2035**

Fire District	District Name	Estimate		Preliminary Estimate	Forecast					% Share of Growth
		2010	2011	2012	2015	2020	2025	2030	2035	
	Bucoda	562	560	560	570	575	675	890	1,065	0.3%
	Olympia	46,478	46,780	47,500	49,550	54,610	60,130	64,980	67,730	18.4%
	Tumwater	17,371	17,570	17,900	19,290	22,930	25,800	28,440	30,090	8.2%
1	Rochester	12,280	12,290	12,160	12,460	12,960	13,700	14,470	15,320	4.2%
2	Yelm	17,540	17,770	17,940	19,270	24,150	29,140	33,470	37,670	10.2%
3	Lacey	86,420	87,150	88,320	91,000	100,090	106,720	113,670	120,660	32.7%
4	Rainier	5,240	5,290	5,320	5,470	5,840	6,270	7,100	7,620	2.1%
5	Black Lake	5,300	5,300	5,310	5,360	5,630	6,190	6,770	7,140	1.9%
6	East Olympia	12,440	12,540	12,670	13,160	13,830	14,660	15,610	16,430	4.5%
7	North Olympia	4,030	4,030	4,050	4,090	4,140	4,200	4,270	4,410	1.2%
8	South Bay	7,780	7,780	7,810	8,010	9,640	9,980	10,350	10,800	2.9%
9	McLane	10,260	10,350	10,410	10,560	10,820	11,360	12,050	12,900	3.5%
11	Littlerock	9,450	9,450	9,480	9,690	10,880	12,140	13,410	14,320	3.9%
12	Tenino	5,990	6,020	6,060	6,160	6,360	6,870	7,850	8,550	2.3%
13	Griffin	5,000	5,000	5,030	5,140	5,270	5,380	5,490	5,630	1.5%
15	Munn Lake	1,130	1,220	1,250	1,310	1,860	2,080	2,270	2,400	0.7%
16	Gibson Valley	570	570	570	580	620	740	860	1,000	0.3%
17	Bald Hills	3,960	3,990	4,020	4,130	4,750	5,000	5,250	5,330	1.4%
Total									369,065	100%

Source: Thurston Regional Planning Council - Small Area Population Estimates and Population and Employment Forecast 2012.

CHALLENGES

5.1 Observation: *TC Medic One does not have a single comprehensive plan that describes its mission, policies, budget, service delivery model, system performance, future service levels, and strategic initiatives.*

It is unclear what analysis or planning processes have transpired in recent years to consider future service levels. TRPC staff experienced some difficulty discovering each of the various TC Medic One documents that describe the overall system and its adopted course of action for the future. The Business Plan, budget, and RED Committee Report seem to comprise the bulk of the system's planning efforts, but they appear principally geared toward meeting the requirements of the annual ALS contracts. While this is an important objective, the documents lack a comprehensive prospective analysis and response to service demands, service levels, costs and revenue projections.

In comparison, King County Medic One operates its EMS system on a six year EMS levy. One year prior to the end of its levy cycle, King County conducts a methodical levy planning process with all of its stakeholders to outline a service delivery plan that it can share with the public. This effort was recently completed and documented in its adopted 2014-2019 Strategic Plan (April, 10, 2013). Their strategic planning process is not only designed to plan for the future, but to build consensus among stakeholders around an agreed upon course of action for its EMS system. Their plan is an important tool for their public education and outreach campaign to solicit voter support on their next EMS levy.

Thurston County's permanent EMS levy, a unique strength, could become its Achilles' Heel unless system resources are dedicated to strategic planning. In 1999, Ken Balsley articulated the following in his statement against the permanent levy on Proposition No. 1:

...This measure will take away accountability and make the Medic One System just another county agency fighting for property tax money.

Annual Medic One levies keep the program in front of the voters and forces management to be responsive to system users. This measure takes away that accountability.

The majority of the voters expressed their support for the levy, but TC Medic One has ventured into a funding environment that no other community operates in. This observation is not suggesting that TC Medic One is complacent in maintaining a service delivery model that it is familiar with, but there is no plan for the next 6, 10, or 20 years. This study reveals that future service expenditures exceed available revenue even with the maximum levy rate funding scenario. Without a comprehensive planning process that engages the system's stakeholders, TC Medic One will not be prepared for future needs, nor engender trust and accountability with system participants and the public.

Recommendation

- 1. TC Medic One should compile its existing plans into a single cohesive document that outlines its current course of action. This product should serve as a baseline for a strategic planning process with all system stakeholders.**
- 2. The EMS Council should identify an appropriate planning process and forward a recommendation and planning timeline to the Thurston County Commissioners.**
- 3. TC Medic One should convene a planning process and seek consent from system stakeholders on a level of service plan and finance strategy prior to running an EMS levy lid lift.**

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MAPS

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DISCLAIMER:
This map is for general planning purposes only. Thurston Regional Planning Council makes no representations as to the accuracy or fitness of the information for a particular purpose.

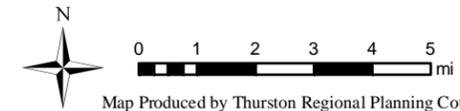
Map 1: Fire and EMS Agencies, Thurston County, WA

TCOMM 9-1-1 Coordinated Fire & Emergency Response Areas

- | | |
|--------------------|--------------------|
| 01 - Rochester | 09 - McLane |
| 02 - Yelm | 11 - Littlerock |
| 03 - Lacey | 12 - Tenino |
| 04 - Rainier | 13 - Griffin |
| 05 - Black Lake | 15 - Munn Lake |
| 06 - East Olympia | 16 - Gibson Valley |
| 07 - North Olympia | 17 - Bald Hills |
| 08 - South Bay | |

The Cities of Olympia, Tumwater & Bucoda operate separate municipal fire departments
 FD09 & FD05 operate jointly as McLane/Black Lake Fire District
 FD01 & FD11 operate jointly as the West Thurston Regional Fire Authority
 FD02 & FD04 operate jointly as the S.E. Thurston Regional Fire Authority

-  Fire Station
-  Fire Station with Medic One Unit
-  City/Town Limits and Indian Reservations
-  Urban Growth Areas
-  Rochester Subarea Boundary



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DISCLAIMER:
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Map 2: THURSTON COUNTY Medic One

2012

Emergency Medical Services (EMS) Levy vs. ALS Service Delivery Costs

EMS Levy Revenue Generated per Quarter Section

- \$500 and Less
- \$501 - \$1,000
- \$1,001 - \$5,000
- \$5,001 - \$10,000
- \$10,001 and Greater

ALS Service Costs > Revenue Generated

+ Medic Unit (ALS Responders)

City/Town Limits

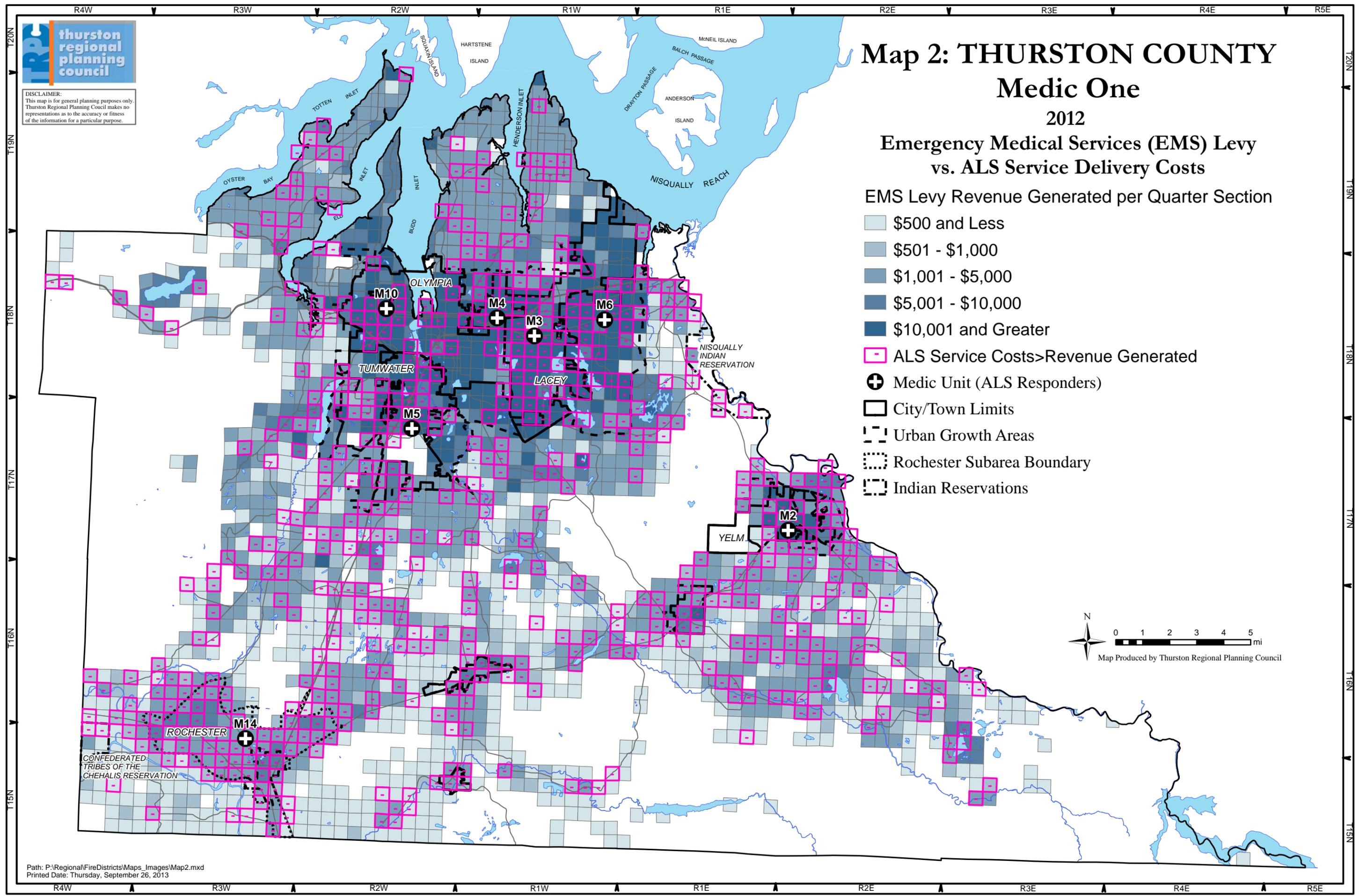
Urban Growth Areas

Rochester Subarea Boundary

Indian Reservations



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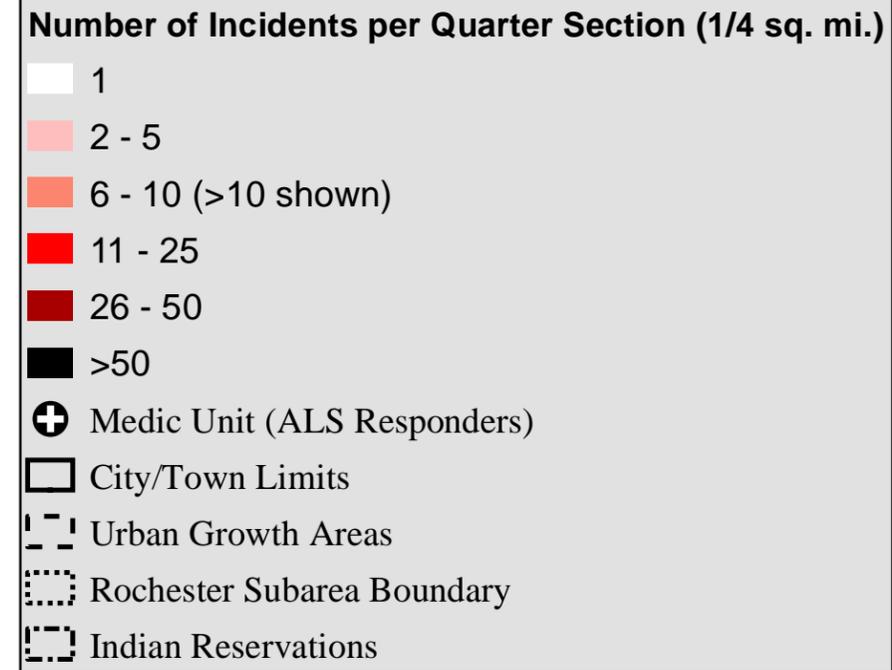
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Map 3: THURSTON COUNTY Medic One

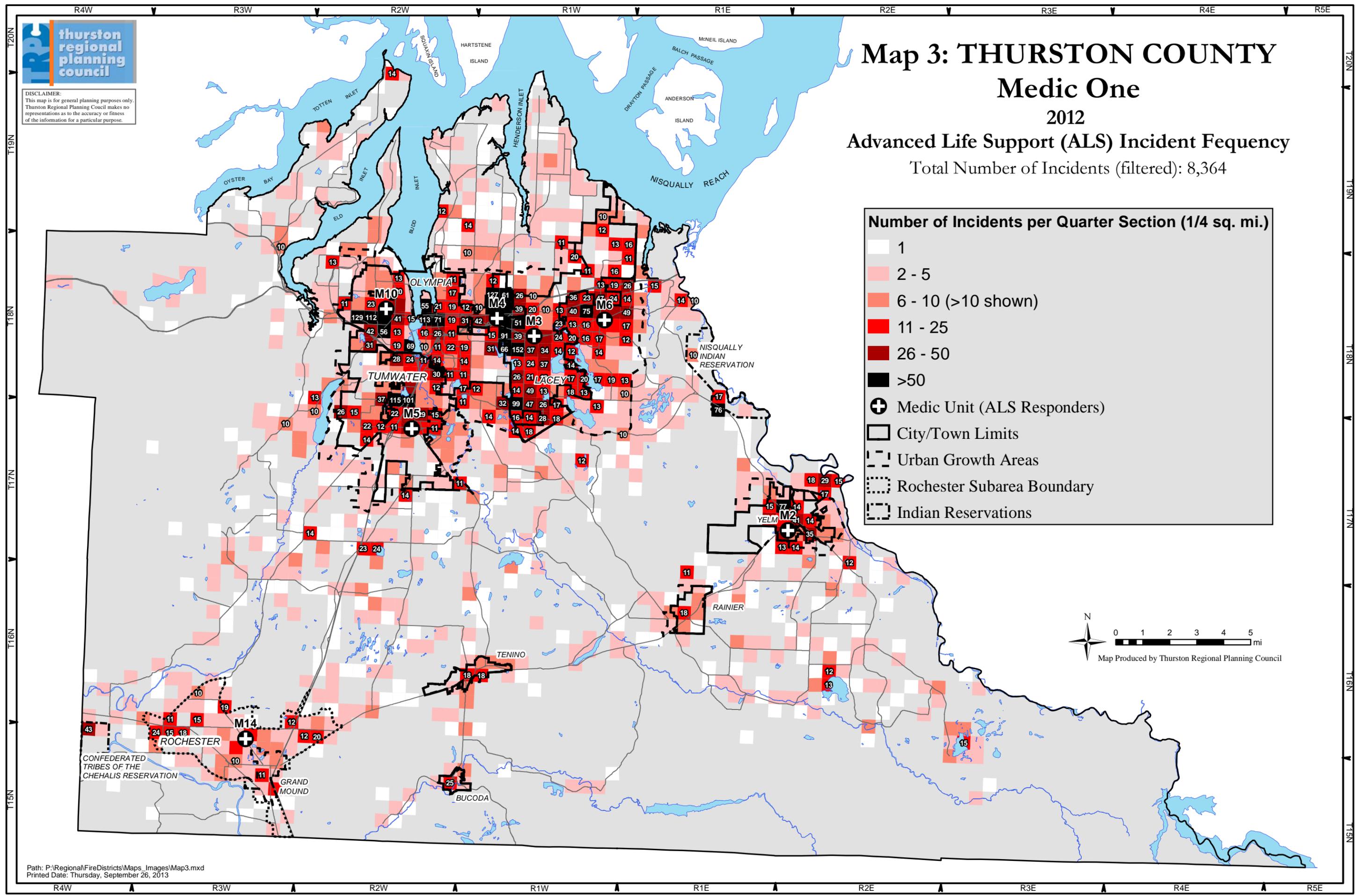
2012

Advanced Life Support (ALS) Incident Frequency

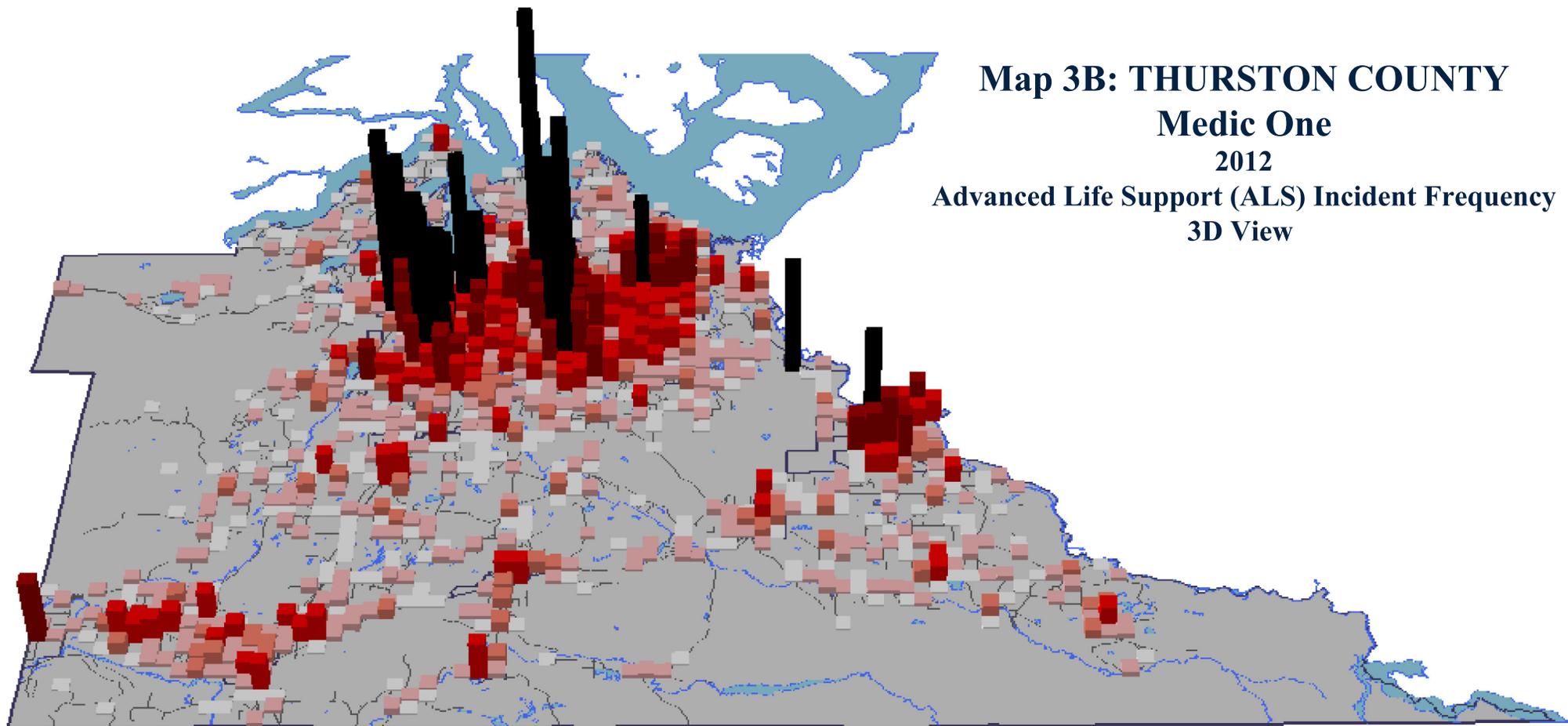
Total Number of Incidents (filtered): 8,364



Map Produced by Thurston Regional Planning Council



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Map 3B: THURSTON COUNTY

Medic One

2012

Advanced Life Support (ALS) Incident Frequency

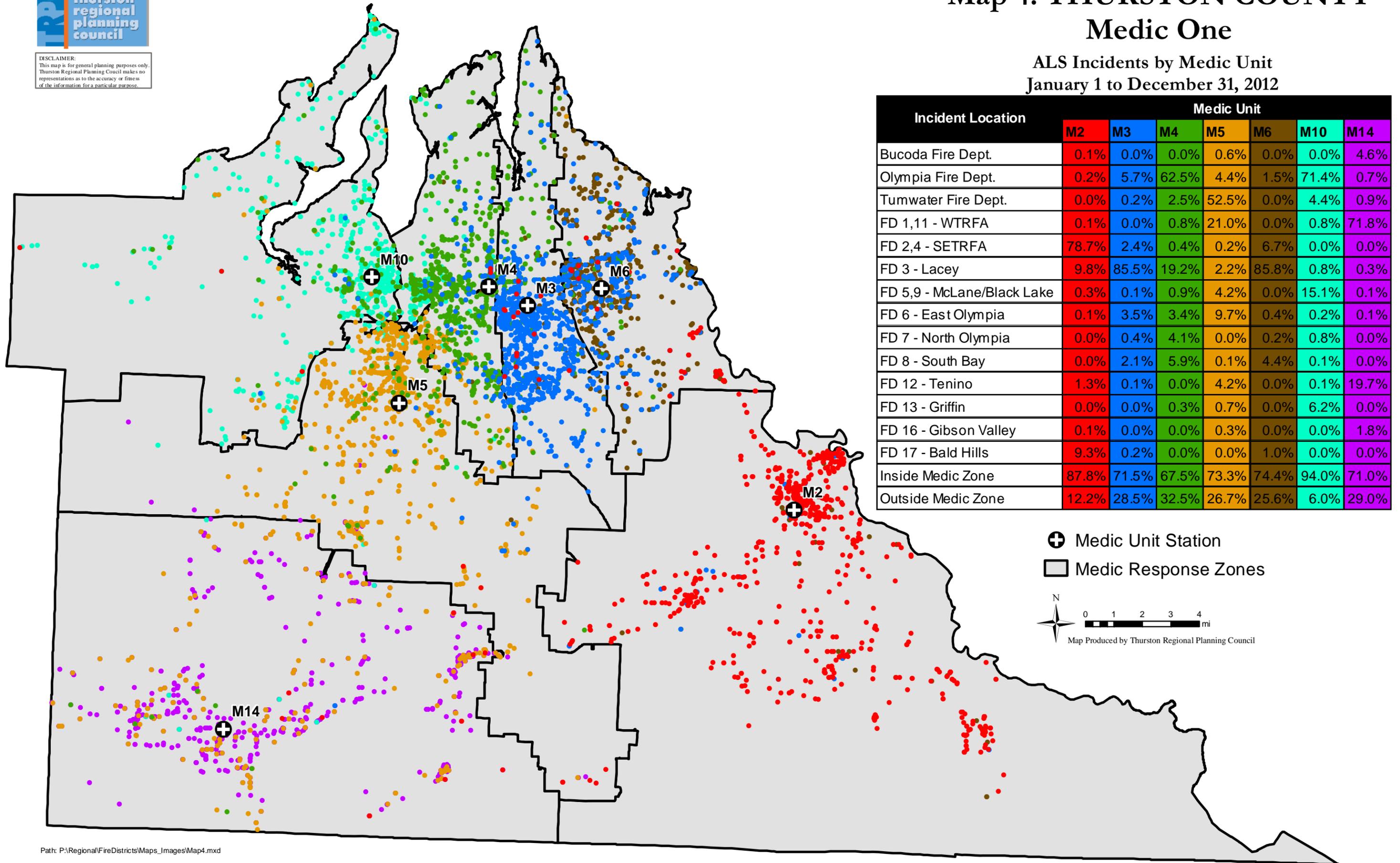
3D View

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Map 4: THURSTON COUNTY Medic One

ALS Incidents by Medic Unit
January 1 to December 31, 2012



⊕ Medic Unit Station
 □ Medic Response Zones

N
 0 1 2 3 4 mi
 Map Produced by Thurston Regional Planning Council

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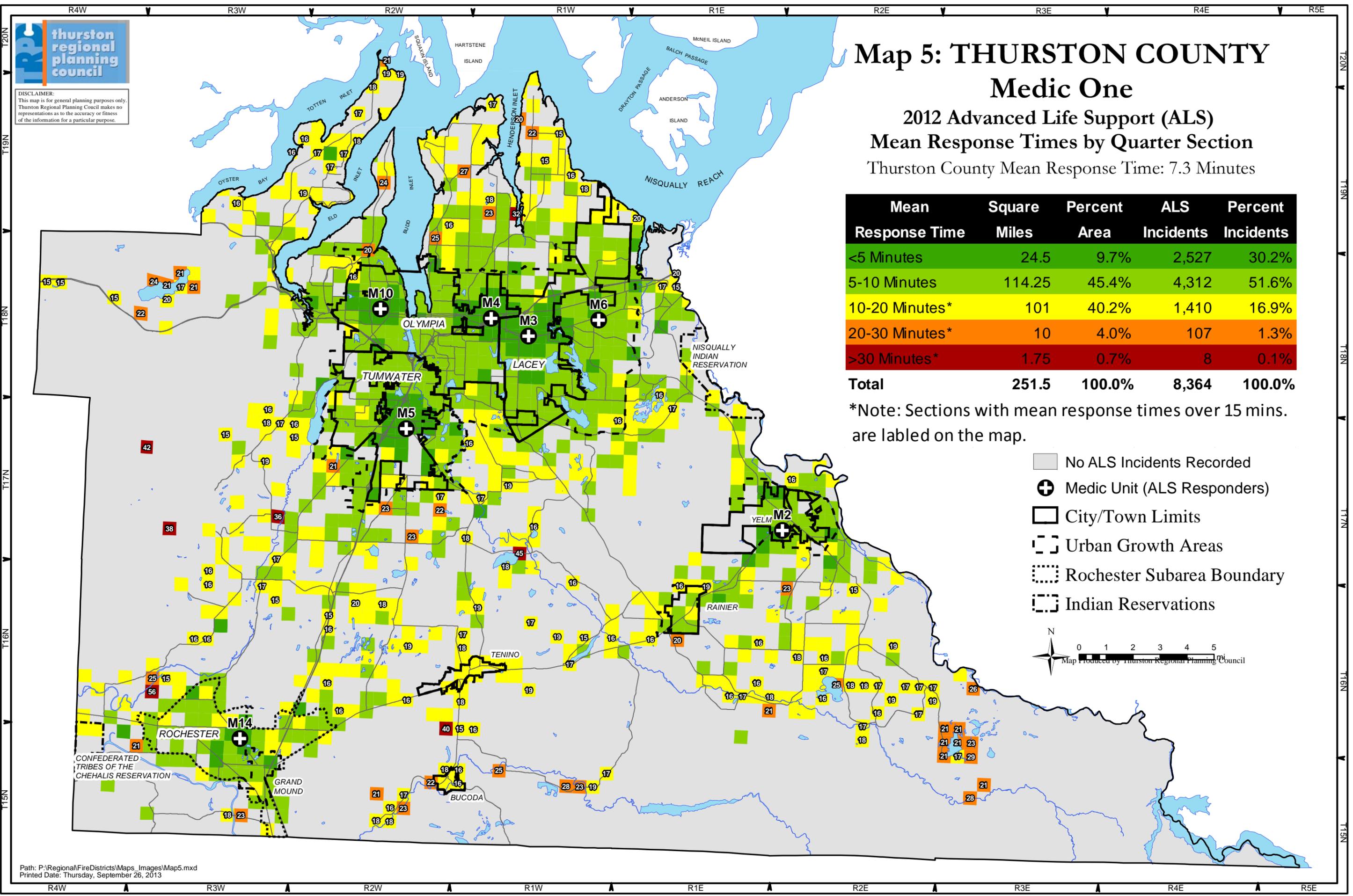
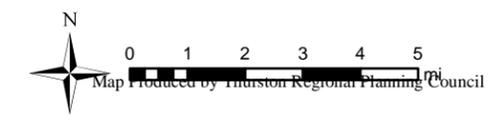
Map 5: THURSTON COUNTY Medic One

2012 Advanced Life Support (ALS)
Mean Response Times by Quarter Section
Thurston County Mean Response Time: 7.3 Minutes

Mean Response Time	Square Miles	Percent Area	ALS Incidents	Percent Incidents
<5 Minutes	24.5	9.7%	2,527	30.2%
5-10 Minutes	114.25	45.4%	4,312	51.6%
10-20 Minutes*	101	40.2%	1,410	16.9%
20-30 Minutes*	10	4.0%	107	1.3%
>30 Minutes*	1.75	0.7%	8	0.1%
Total	251.5	100.0%	8,364	100.0%

*Note: Sections with mean response times over 15 mins. are labeled on the map.

- No ALS Incidents Recorded
- + Medic Unit (ALS Responders)
- City/Town Limits
- Urban Growth Areas
- Rochester Subarea Boundary
- Indian Reservations



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APPENDIX A

**Thurston County Proposition No. 1
Medic One Levy**

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Thurston County - Proposition No. 1 Medic One Levy



Official Ballot Title:

Emergency Medical Services Permanent Levy

Shall Thurston County be authorized to impose a PERMANENT regular property levy of \$0.50 or less per one thousand dollars of assessed valuation, for the purpose of continued funding of the Emergency Medical Services Program (Medic One)?

Levy Yes _____ Levy No _____

Statement For:

Medic One/EMS (Emergency Medical Services) system has earned our support for a permanent levy.

For 25 consecutive years, this community has, by a super majority, passed a levy to fund one of the best countywide, pre-hospital medical care systems in the nation. Thanks to a change in state law, which took effect this July, we can now put Medic One on the same secure funding basis as police and fire services. The \$50,000+ annual election costs can be spent on providing direct services instead.

Medic One answered 16,011 calls in 1998 and transported 3,267 life threatened patients to the hospital. As our population grows and ages, secure funding support for Medic One is essential. Lives depend on it.

Medic One is accountable to both a Citizen Council and the County Commissioners.

Medic One's service performance and budget is carefully scrutinized monthly by a 14 person Citizen Council representing the cities, 15 fire districts and the county. Every budget item must also be approved by the Board of County Commissioners. These accountability steps will not change with adoption of the permanent levy.

This year's budget includes another quick response unit.

The replacement of Olympia's 4th Ave. bridge necessitates speeding up plans to station a *sprint* paramedic vehicle on the West side to maintain our response time standards. Last year Medic One responded to 242 patients whose hearts had stopped. Due to Medic One services, a significant number of those patients are living today. We need to continue our cardiac arrest save rate, which is five times the national average. Please vote yes, the life you save may be your own, or a loved one's.

Voters' Pamphlet Statement prepared by: Jon W. Halvorson, John Hough, Joe Pellicer, M.D.

Rebuttal of Statement Against:

Medic One expenditures and performance will continue to be managed by and accountable to a 14 person Citizen's Council and the County Commissioners. Special public accounting reports and the results of customer satisfaction surveys will be available to the public. Since by law only one rate can be adopted, revenue from the 50 cent rate will be held in a dedicated fund for future year services. Medic One has not and will not waste money.

(issue continued on next page)

Explanatory Statement:



Since 1974, Thurston County has operated an Emergency Medical Services Program (Medic One) funded by annual excess property tax levies. The proposition would levy a permanent tax of fifty cents (\$0.50) or less per thousand dollars of assessed valuation on all taxable property in Thurston County for collection starting in 2000. The tax would continue the operation of the Emergency Medical Services Program (Medic One) indefinitely. If the permanent tax levy is approved, it may be reconsidered by voters if a referendum petition signed by at least fifteen percent of the registered voters in Thurston County is filed with the Thurston County Auditor.

Explanatory statement prepared by: David Klumpp, Senior Deputy Prosecuting Attorney

Statement Against:

We have a well-run, effective Medic One System because we have voter accountability. This measure will take away accountability and make the Medic One System just another county agency fighting for property tax money.

Annual Medic One levies keep the program in front of the voters and forces management to be responsive to system users. This measure takes away that accountability.

This measure also raises Medic One's levy from 33 cents to 50 cents per thousand, an increase of nearly one-third.

Its Referendum clause is a farce. No local referendum has ever been approved by the voters.

Vote for accountability. Vote no on this levy.

We will have a chance to vote on an annual, and better, Medic One levy later.

Voters' Pamphlet Statement prepared by: Ken Balsley.

Rebuttal of Statement For:

Under the current system, the voters' have the final accountability and that's the way it should be. We can do better than this. Vote NO this time around and yes when we get a new Medic One levy.

APPENDIX B

**Thurston County Medic One
Emergency Medical Services Council
Bylaws**

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**THURSTON COUNTY MEDIC ONE
EMERGENCY MEDICAL SERVICES COUNCIL**

BYLAWS

Amended 7 April 2009

ARTICLE I. NAME

The name of the organization shall be known as the Thurston County Emergency Medical Services Council.

ARTICLE II. PURPOSE

To provide efficient and effective prehospital emergency medical services throughout Thurston County.

ARTICLE III. SCOPE

The Thurston County Emergency Medical Services (EMS) Council:

- 3.1. Shall review and evaluate the provision of the publicly funded emergency medical service system, known as "MEDIC ONE" for the residents of Thurston County.
- 3.2. Shall advise the Thurston County Commissioners regarding the development, policies, and planning for the system.
 - A. Identify needs and priorities including concerns of citizens and governmental agencies.
 - B. Recommend funding sources and priorities in support of the system.
- 3.3. Shall make recommendations to the County Commissioners in the following areas:
 - A. The planning process for the provision of emergency medical services provided by the system.
 - B. Annual budget and budget amendments, including the means of financing.
 - C. All purchase contracts in excess of \$15,000.
 - D. All intergovernmental agreements and personal services contracts.
 - E. All non-budgeted expenditures in excess of \$1,000.
 - F. The compliance of the Medical Program Director with his/her contract.
- 3.4. In addition to the above, the EMS Council has the authority:
 - A. To provide representation and advice to the West Region Emergency Medical Services and Trauma Care Council in the development of emergency medical services for the West Region.
 - B. To provide public education and information on public emergency medical services.
 - C. To review and evaluate the system's development as it relates to the emergency health care of citizens in Thurston County.

ARTICLE IV. COMPOSITION AND MEMBERSHIP

- 4.1. The composition of the Thurston County Emergency Medical Services Council, appointed by the Board of County Commissioners is as follows:
 - A. One Elected Official or designee, or designated alternate from each ALS contracting agency and an additional Elected Official or designee, or designated alternate from any other agency that has a contract for all fire services with an ALS contracting agency.

- B. One County Commissioner or designee, or designated alternate.
 - C. Three Citizens-at-Large, one from each of the County Commission Districts, at least one of whom shall be a physician.
 - D. One Elected Official or designee, or designated alternate representing all cities or towns such as Yelm, Rainier, Tenino and Bucoda, none of whom shall be from an agency as described in Article IX.4.1.A., as recommended by the South County Mayors.
 - E. One Fire Commissioner from each of the County Commission Districts, not one of whom shall be from an agency as described in Article IX.4.1.A., nor from the same Fire District, as recommended by the Thurston County Fire Commissioners' Association.
 - F. The Medical Program Director or designated alternate (non-voting).
 - G. The Operations Committee Chairperson or designated alternate (non-voting).
- 4.2. The term of appointment is to be determined by the recommending entity except for the citizen-at-large positions whose term will be in two-year increments.
- 4.3. The Board of County Commissioners may declare any position vacant if the member or alternate have three consecutive unexcused absences. The entity providing the member shall be asked to nominate a replacement.
- 4.4. The designated alternate(s) must be defined by letter to the EMS Council by the appointing entity.

ARTICLE V. OFFICERS

- 5.1. The officers shall be Chairperson and Vice-chairperson elected by the majority of the Council for a one-year term.
- 5.2. The Chairperson shall preside at all regular and special meetings of the Council. The Vice-chairperson shall preside when Chairperson is absent.
- 5.3. In the absence of the Chairperson and Vice-chairperson, the Council will appoint an acting Chairperson.
- 5.4. Any vacancies in the above offices shall be filled by a special election of the EMS Council.
- 5.5. Nomination of officers will take place annually in the month of February or as soon thereafter as is possible.
- 5.6. Election of officers will take place annually in the month of March. Term of office shall begin in March.

ARTICLE VI. MEETINGS

- 6.1. Meetings of the full body shall occur no less than once each quarter.
- 6.2. The fiscal year shall be the same as the calendar year.
- 6.3. A majority of voting positions currently filled and present at the meeting shall constitute a quorum of the body.

- 6.4. Special meetings may be called by the Chairperson or majority of the members consistent with requirements of the Open Public Meetings Act.
- 6.5. Robert's Rules of Order shall prevail, unless otherwise specified in the bylaws.

ARTICLE VII. EMS COUNCIL STANDING AND AD HOC COMMITTEES

- 7.1. Nominating Committee: Three Council members, appointed by the Chairperson by December of each year, to nominate willing and capable Council members as candidates for the offices of Chairperson and Vice chairperson.
- 7.2. Budget Committee: Three Council members, appointed by the Chairperson by April of each year shall review and make recommendations on the annual budget to the EMS Council, and assist in making presentations to the Board of County Commissioners concerning the EMS budget.
- 7.3. Advanced Life Support (ALS) Contract Negotiations Committee: Three Council members appointed by the Chairperson will assist in negotiating contracts between Medic One and the providers of ALS service for the ensuing year(s), and present contract recommendations to the EMS Council for approval prior to submission to the Board of County Commissioners. The members of the ALS Contract Negotiations Committee shall not be representatives of an agency as described in Article IV.4.1.A.
- 7.4. The EMS Council Chairperson, with the approval of the Council, may appoint ad hoc committees and/or task forces as deemed necessary.

ARTICLE VIII. OPERATIONS COMMITTEE

- 8.1. An Operations Committee, which shall be advisory to the EMS Council, is hereby established.
- 8.2. The Committee membership shall include persons vested with decision making authority, as follows:
 - A. One ALS Chief Officer representative or designee, or designated alternate from each ALS contracting agency.
 - B. BLS Chief Officer representative(s) or designee, or designated alternate as appointed annually by the Thurston County Association of Fire Chiefs, in an amount proportionate to the total of the ALS Chief Officer representation, none of whom shall be representatives of an agency as described in Article IV.4.1.A.
 - C. One representative or designated alternate of Providence St. Peter Hospital, as appointed by Hospital Administration.
 - D. One representative or designated alternate of Capital Medical Center, as appointed by Hospital Administration.
 - E. The Director or designee, or designated alternate of the Department of Communications.
 - F. One representative or designated alternate of Law Enforcement, as collaboratively selected by the chief officers of the Thurston County Law Enforcement entities.
 - G. The Medical Program Director or designee, or designated alternate.
 - H. One Paramedic representative or designated alternate as selected by the Paramedic Association.
 - I. One representative or designated alternate of the Thurston County-Licensed Private Ambulance Services, as collaboratively selected by the currently licensed private ambulance services.

- J. One representative or designated alternate of local Air Ambulance Service, as designated by the air ambulance agency.
- 8.3. The term of appointment is to be determined by the recommending entity.
- 8.4. Designated alternates must be defined by letter to the Operations Committee by the appointing entity.
- 8.5. The Committee Officers will be in accordance with Article V.
- 8.6. Meetings shall be in accordance with Article VI.
- 8.7. The Chairperson, with approval of the Committee, may appoint ad hoc committees and/or task forces as deemed necessary.
- 8.8. The primary responsibility of the Operations Committee is to coordinate the provision of the Advanced Life Support (ALS) and Basic Life Support (BLS) services. The function of the Operations Committee shall be as follows:
 - A. Development of operational priorities, policies and procedures for system development, programming, operations, for adoption by the EMS Council.
 - B. To review and recommend for approval the Medic One proposed budget to the EMS Council.
- 8.9. The EMS Council may declare any position of the Operations Committee vacant if the member or designee, or designated alternate have three consecutive unexcused absences. The entity providing the member shall be asked to nominate a replacement.

ARTICLE IX. AMENDMENTS

Bylaws may be changed upon recommendation of the EMS Council to the Board of Commissioners. Amendments will be by County Resolution.

Adopted: 01/16/79
Amended: 07/22/80, 07/14/81, 10/09/84, 02/16/88, 01/03/95, 05/11/98, 01/07/02, 08/11/03, 01/12/04, 05/12/08, **04/07/09**
Edited: 06/19/02, to recognize Fire District 1 representation to EMS Council; to recognize FD1/FD14 merger; 03/01/06 to update West Region EMS information;
Reformatted: 05/14/03

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