

The Alaska Trauma System 2019

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THE PROBLEM:

- ▶ Trauma is the leading cause of death for Alaskans under 45 yo.
- ▶ It is the 3rd leading cause of death for all alaskans.
- ▶ Alaskans die at a rate 50% higher and Alaska native people 250% greater than that of US general population.



Trauma Mortality in Alaska

- -Alaska has the 7th highest mortality rate from trauma in the US. Improved from 2nd highest in 2003.
- -Trauma deaths in Alaska result in more years of potential life lost than heart disease and cancer combined.
- -"The average injury-related death in the U.S. costs over \$1 million in medical costs and lost wages. "
Amber Williams, executive director of the Safe States Alliance. 2015




Alaska

- 400-500 alaskans die each year.
- Over 4000 admitted to the hospital.
- Over 1000 with permanent disability.
- 800 alaskans hospitalized with brain or spinal cord injuries.



THE SOLUTION:

- ▶ -Trauma centers and trauma systems based on military experience and scientific data have been developed to address this public health problem.
 - ▶ -Trauma systems consist of designated centers working with prehospital and public safety to coordinate all aspects of care from bystander care to transport and specialty services.
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Outcomes

- -Trauma systems have been shown to decrease mortality for all seriously injured patients from 9-20% and decrease preventable deaths up to 75%.



Alaska Trauma System History

- 1993 statute- EMS authority for designating trauma centers created.
- Hospital participation voluntary.
- Standards for trauma center designation follow American College of Surgeons criteria.
- 2008 Twenty-four hospitals in Alaska
- One level II center - ANMC
- Four level IV centers- NSH,SCH,YKHC,MEH



Alaska Trauma System Development

- -2008 American College of Surgeons committee on trauma reviewed Alaska's trauma care and made recommendations for a path forward.
- -2010 Trauma Fund act co-sponsored by Senators John Coghill and Bettye Davis signed by Governor Sean Parnell after unanimous passage by both house and senate.
- It incentivized hospital participation and created trauma program manager position under DHSS.



RESULTS

- **Money distributed 2010 -2019 4.25 million
None since 2015.**
- **After passage facility participation increased from
20% to 75% of all facilities.**
- **Two level II trauma centers PAMC and ANMC**
- **Two level II pediatric trauma centers PAMC and
ANMC**
- **15 level IV facilities**

Patient Outcomes

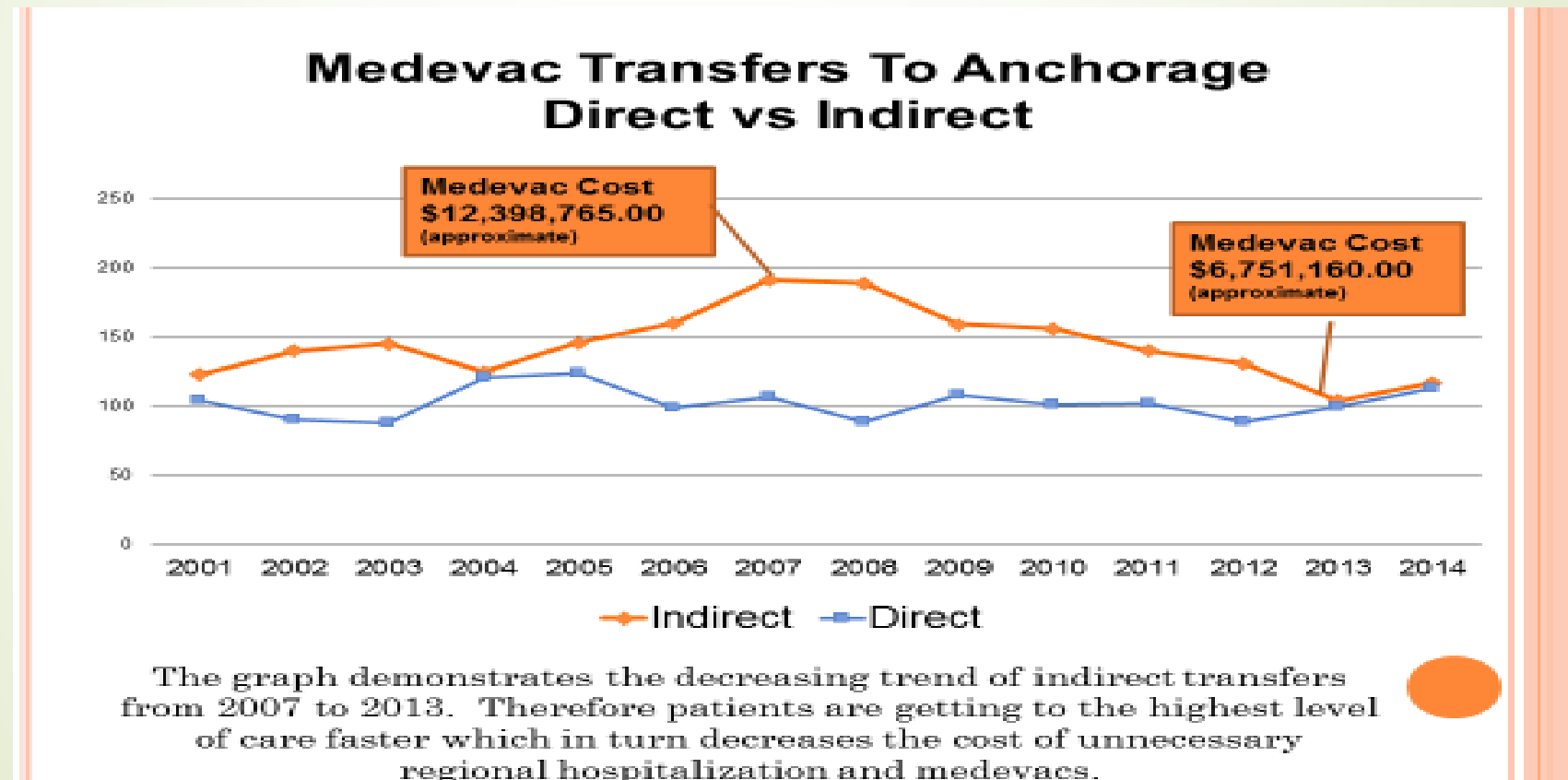
- Alaska transportation (MVC, pedestrian, ATV) related injury mortality rate decreased 25% after the implementation of the state trauma system.

<https://www.cdc.gov/injury/wisqars/facts.html>

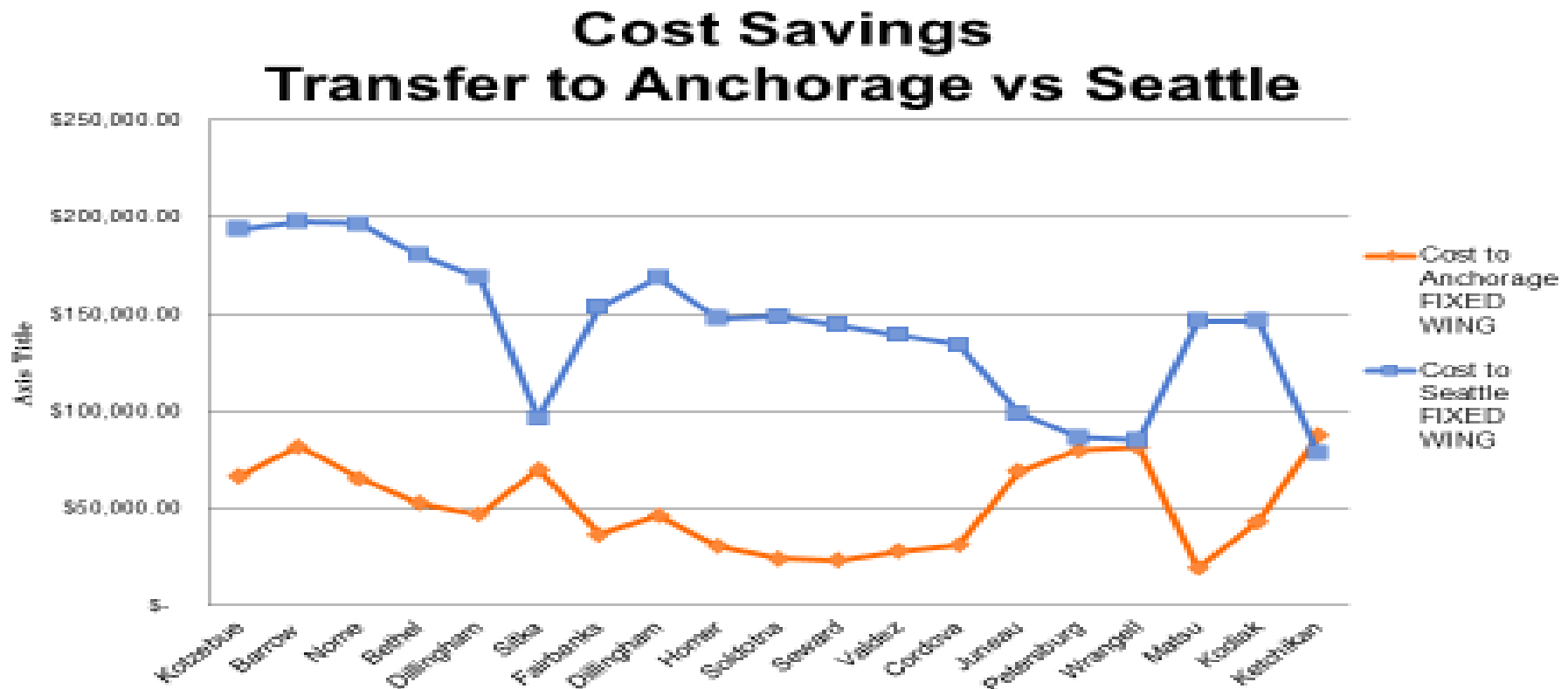
➤ 1999-2010	20.38/100,000
➤ 2011-2017	14.91/100,000

Cost Savings

- Medicaid medevac costs decreased 45% (\$ 5.6 mill) as system implemented and guidelines and efficiencies introduced



Cost Savings



The graph demonstrates the cost savings of transferring a patient to Anchorage compared to Seattle. The average cost savings is **\$90,000.**



LEVEL IV TRAUMA CENTERS

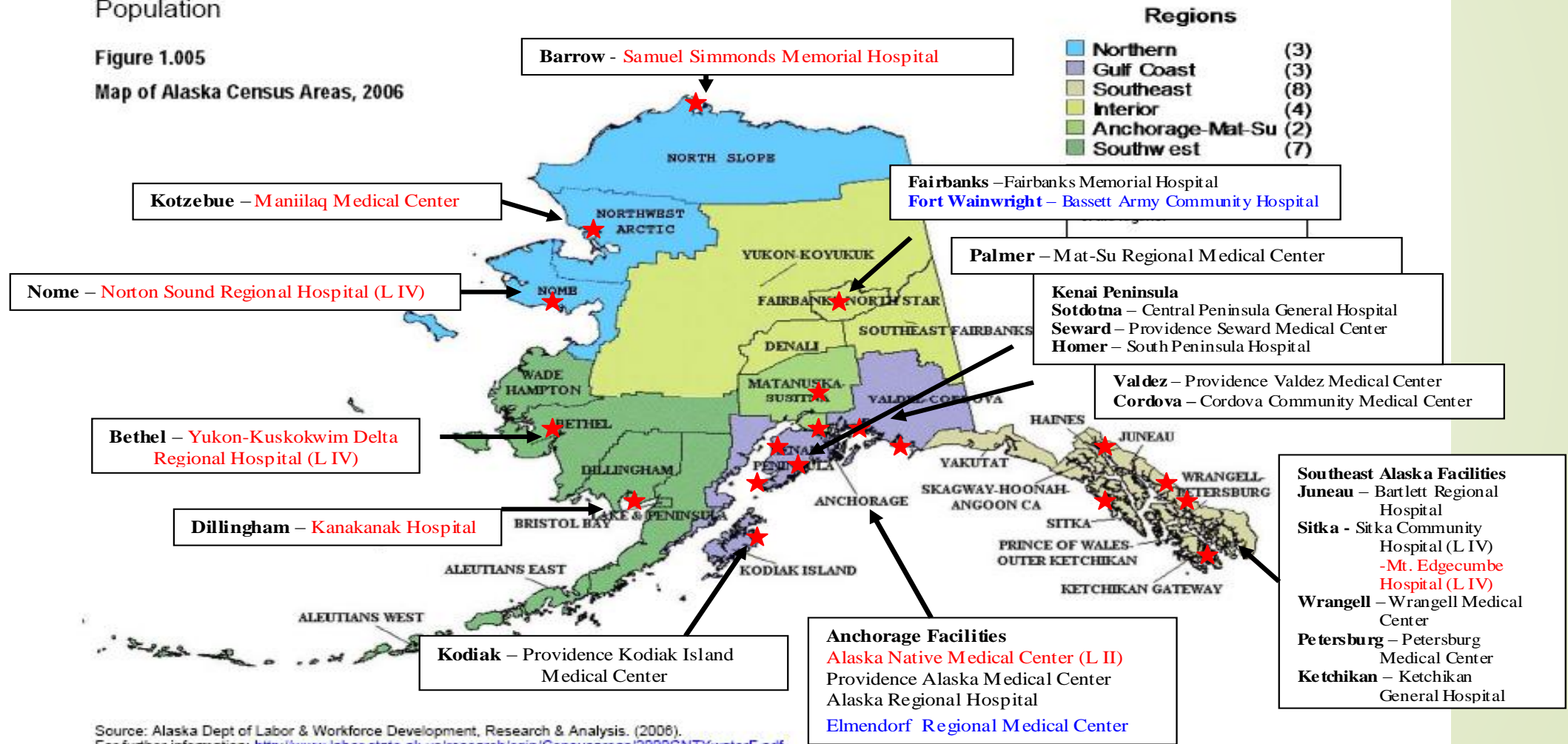
- There may or may not be surgical coverage. Not essential component.
- Key is ability to quickly stabilize and recognize patients that need to be transferred
- Optimal care each step of the way
- Performance improvement integral part

Acute Care Facilities in Alaska

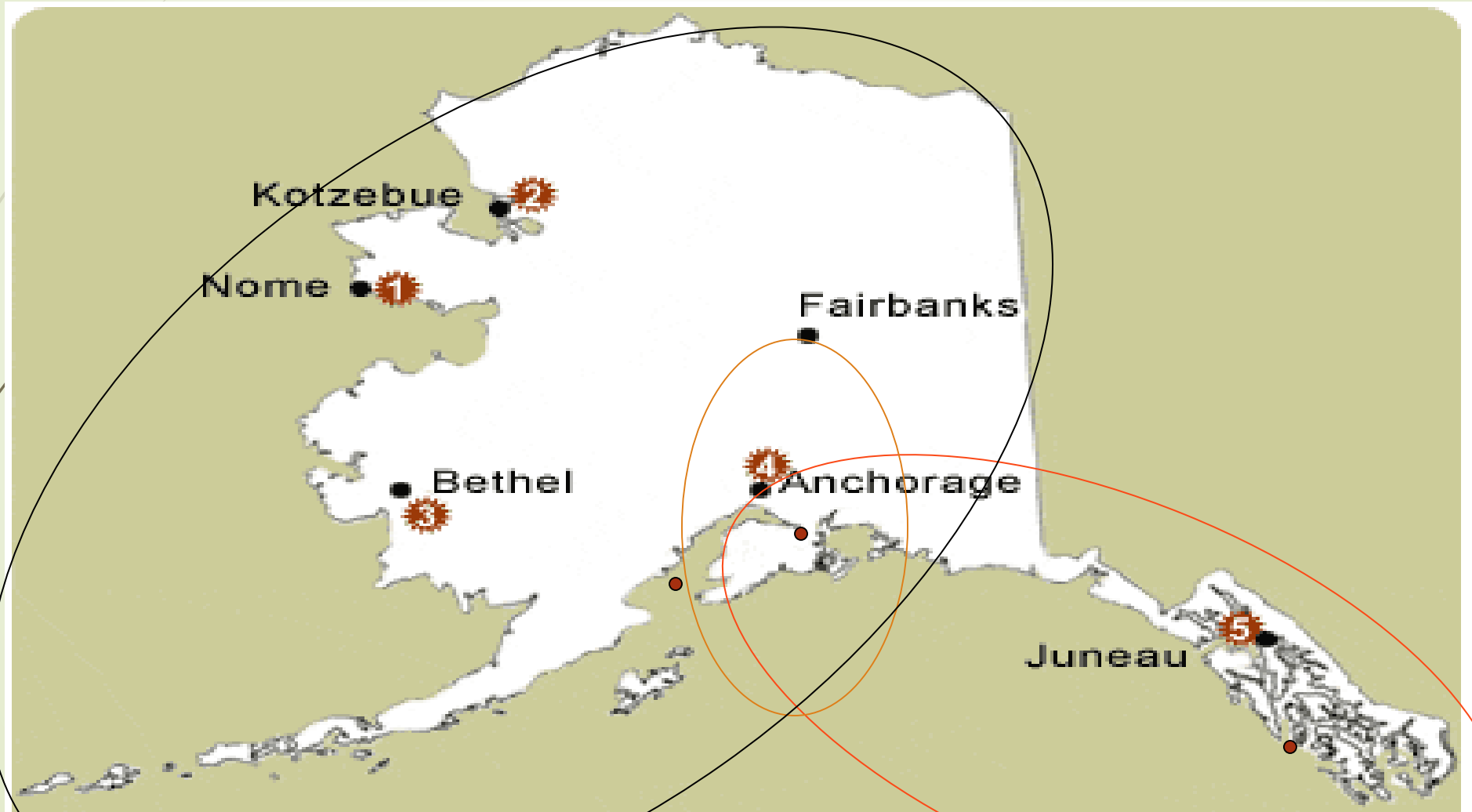
Population

Figure 1.005

Map of Alaska Census Areas, 2006



The Future: Alaska Trauma System(s)





CONCLUSION

- The trauma system is the backbone of the state's response to getting patient's with time critical conditions (injury, MI, stroke, obstetrical emergency) to appropriate care .
- All Alaskans need and expect access to a trauma system. Rich/poor, urban /rural, republican or democrat all are vulnerable, all benefit from the trauma system.



Why should do this?

- The question is not if you are going to take care of injured patients . Rather it is how are you going to take care of these patients?

Ultimately

- You should do this because it makes a difference and it is the care you want for your family and neighbors if they are seriously injured.