



Variation in Costs of Foundational Public Health Services for WA LHJs: What factors help explain this

Betty Bekemeier, PhD, MPH, RN—University of Washington School of Nursing

Justin Marlowe, PhD, CGFM—University of Washington Evans School of Public Policy & Governance

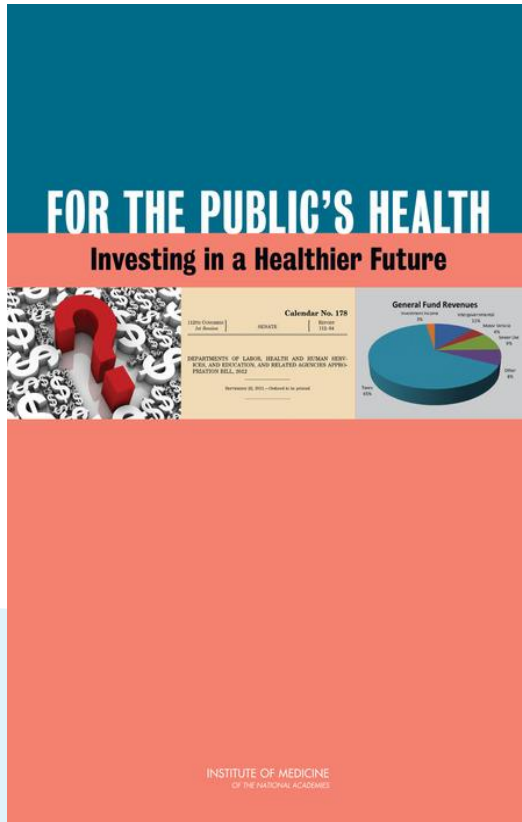
Jennifer Tebaldi, MBA—Washington State Department of Health

Sharee Squires—RN—University of Washington School of Nursing

November 3, 2015--APHA Annual Conference

Funded by RWJF PBRN Program (RWJF #71132)

PH Finance Systems



- “profoundly misaligned” financing system
- National imperative to better define, articulate, & measure PH activities & to estimate their revenues & expenditures
- local communities not equitably served by a core capacity for health promotion & protection

(IOM, 2012)

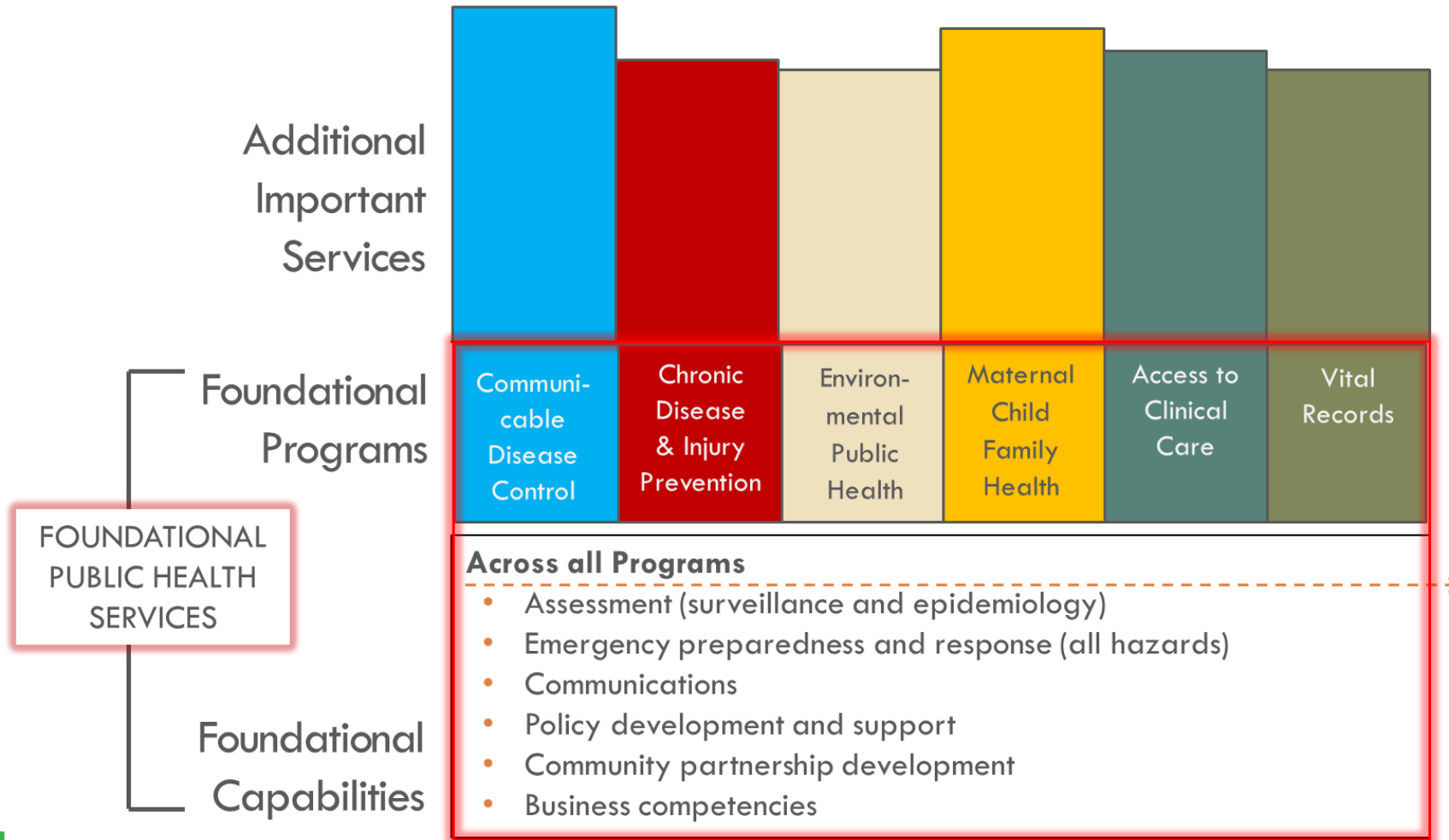
National Delivery & Cost Studies (DACCS) funded

- RWJF's DACCS program launched in 2013
- To examine how **characteristics** of PH delivery systems influence cost, quality, & equity of PH service delivery
 - E.g. size, scope of activity, division of roles, contributing organizations, & methods of resource use
- 11 state PBRNs funded (e.g. FL, NC, OH, NY, CA)

Washington's Delivery & Cost Study (DACCS)

- Using the Foundational PH Services Framework
- Examine what factors promote & inhibit the provision of FPHS
- Study Aims
 - Examine variation in **Unit Costs** in FPHS
 - Determine how organizational & community factors influence costs of PH system service delivery in WA State

Framework for the Foundational Services



Data Collection Instrument

- *FPHS Cost Estimation Instrument* developed
 - For developing cost function estimates & adapted from
 - Substance abuse services cost analysis program (SASCAP) instrument
 - Instrument used in WA State FPHS Workgroup data collected in 2014
 - Measures where LHJ incur costs, and also perceived need
 - Instructions & support included
 - list of occupation definitions,
 - definitions of each FPH program and capability
 - definitions of non-labor expenses
 - Respondents provided estimates of indirect labor & non-labor costs
 - FTE per occupation across the 6 FPH programs & 6 capabilities
 - salary paid per occupation
 - each FTE split within each FPH program & capabilities into its individual duties
 - non-labor expenses estimated (e.g. fleet cars, cellular phones, insurance)

Sample

- Selection criteria considered
 - Avoiding survey burden
 - Mix of:
 - Rural, micropolitan, & urban
 - Size of population served
 - Departments and Districts
 - Single county & multi-county
 - Standalone agency or combined with human services
- FPHS Workgroup reviewed final selection
- 10 WA LHJs completed *FPHS Cost Estimation Instrument*
 - 71% response rate

Analysis

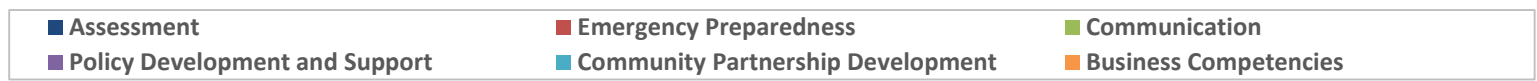
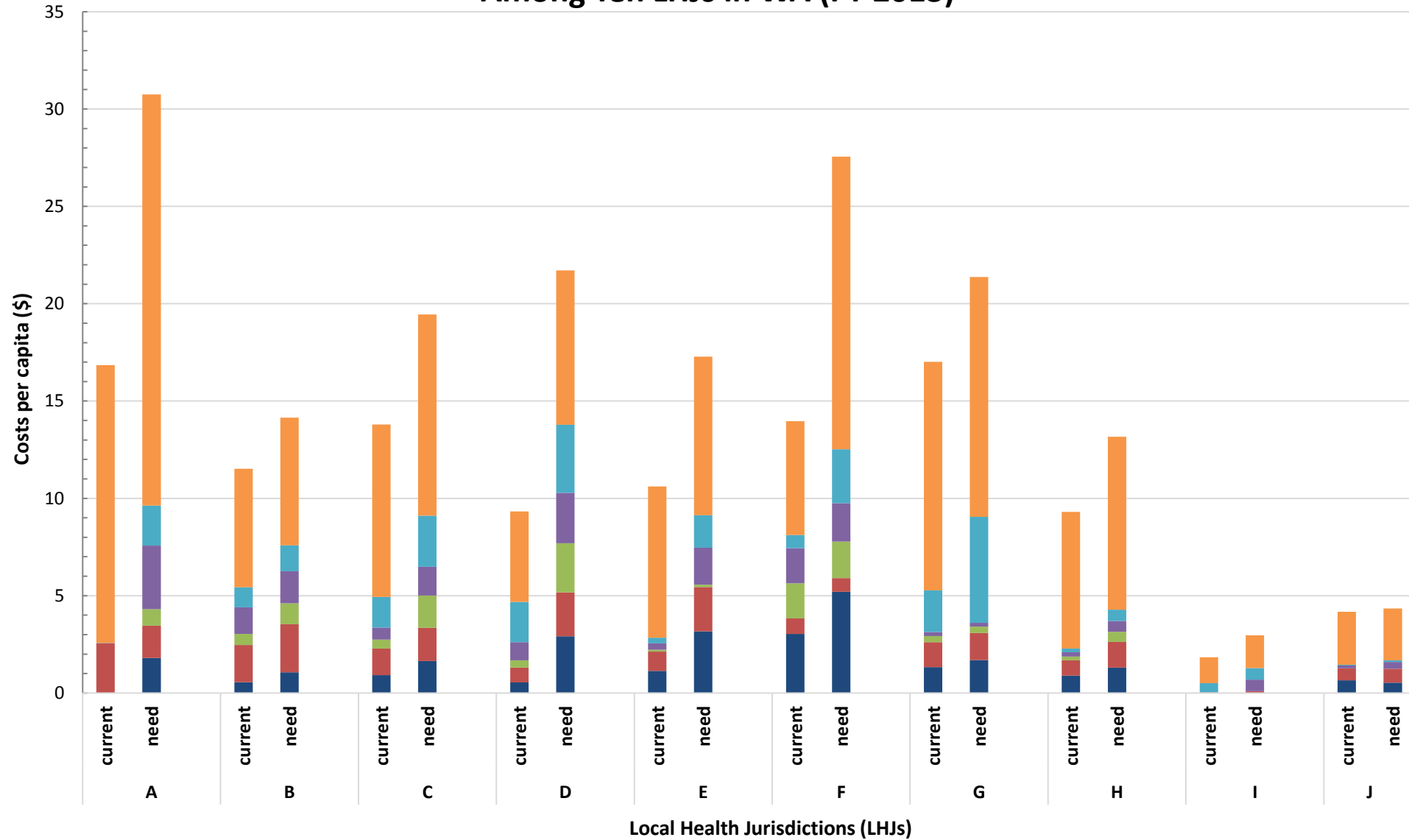
- Combined cost & expenditure data with selected LHJ Service measures from the Activities & Services Inventory
 - Used service data that captured key elements of FPHS
- Examined unit cost estimates while controlling for demographic & other contextual data
 - population, poverty, unemployment, local voters' "willingness to spend" on govt services, metropolitan vs. micropolitan area, NACCHO governance variables

Results

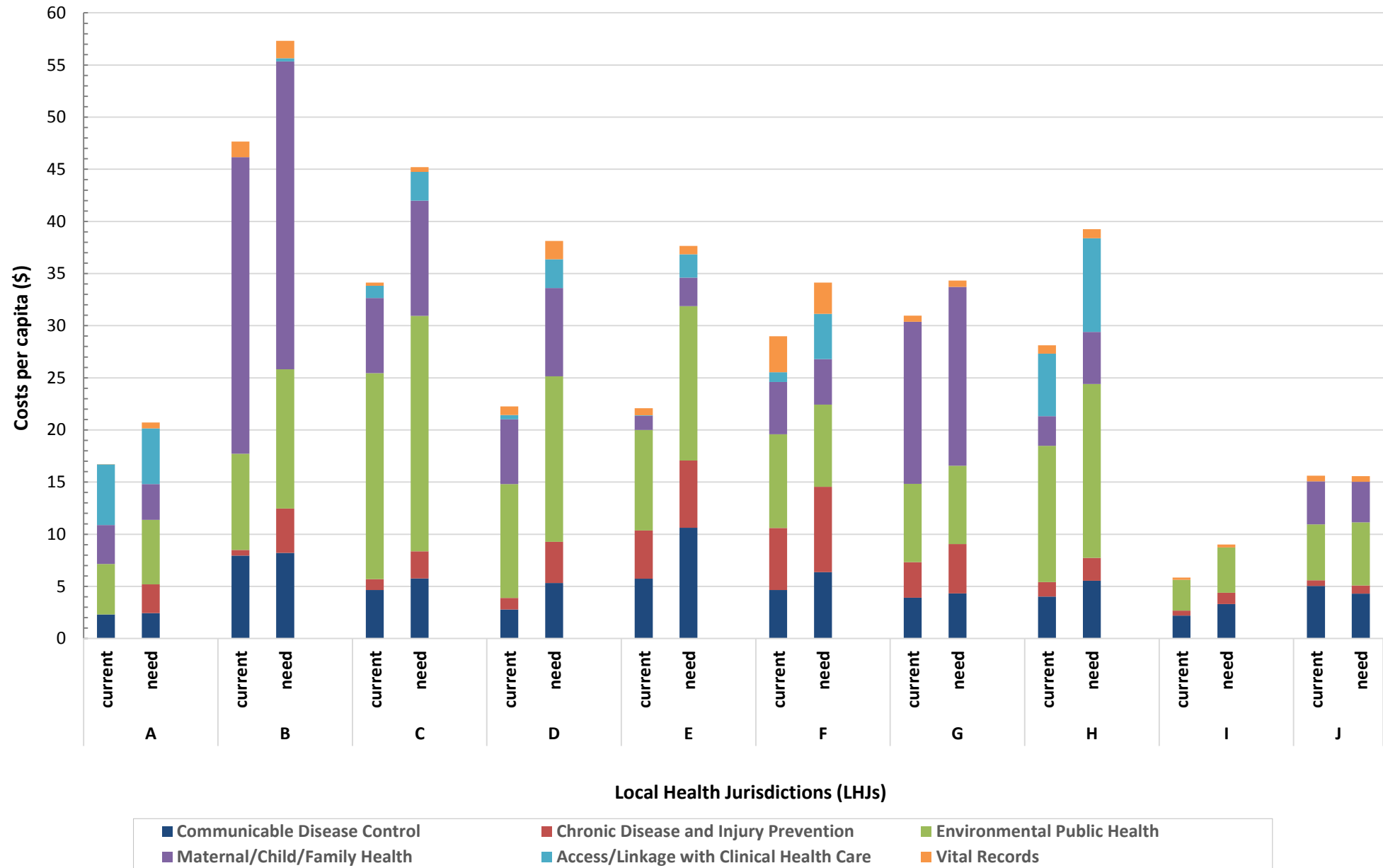
- Unit costs for selected FPHS units are measurable, and vary substantially across LHJs.
- Variation in unit costs is closely related to socioeconomic factors and political context.
- Unexplained variation still exists.



Current and Needed Costs for Foundational Public Health Capabilities Among Ten LHJs in WA (FY 2013)

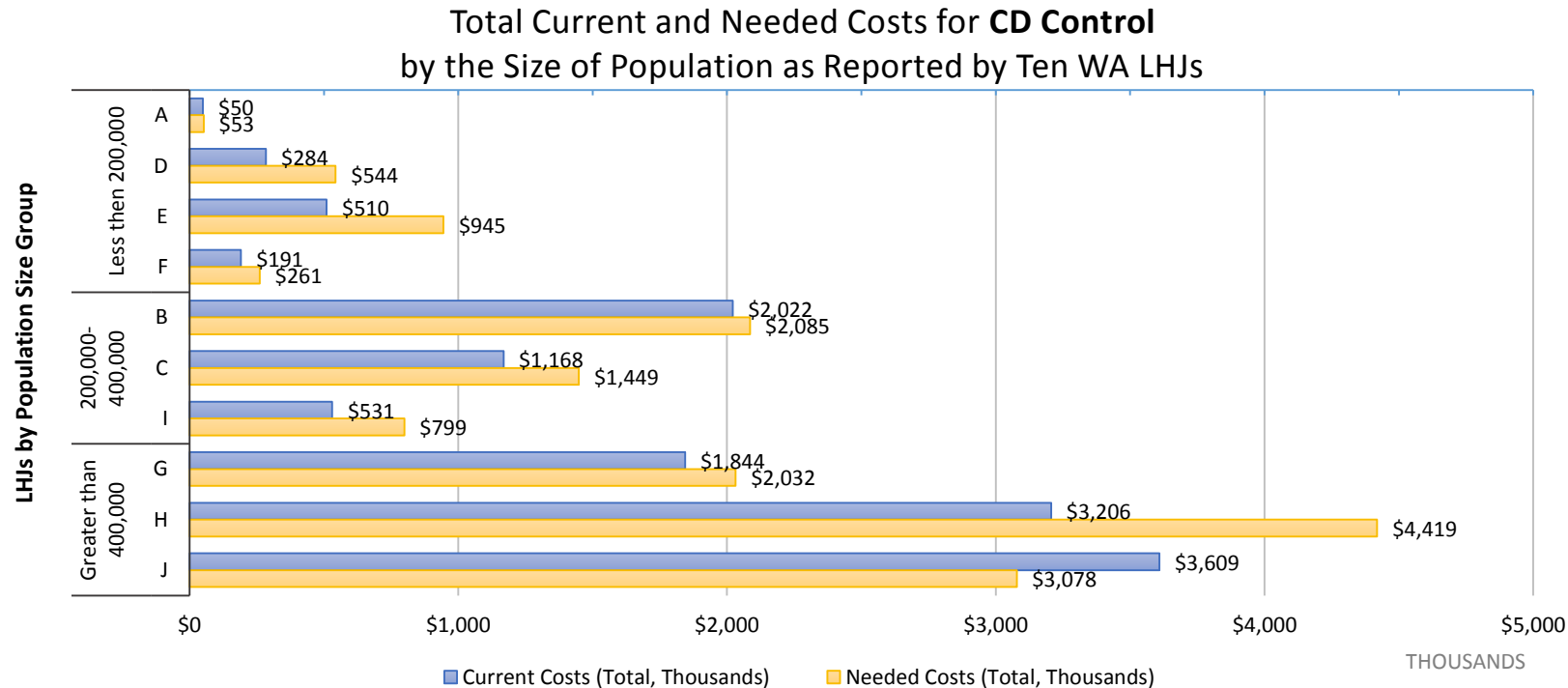


Current and Needed Costs for Foundational Public Health Programs Among Ten LHJs in WA (FY 2013)



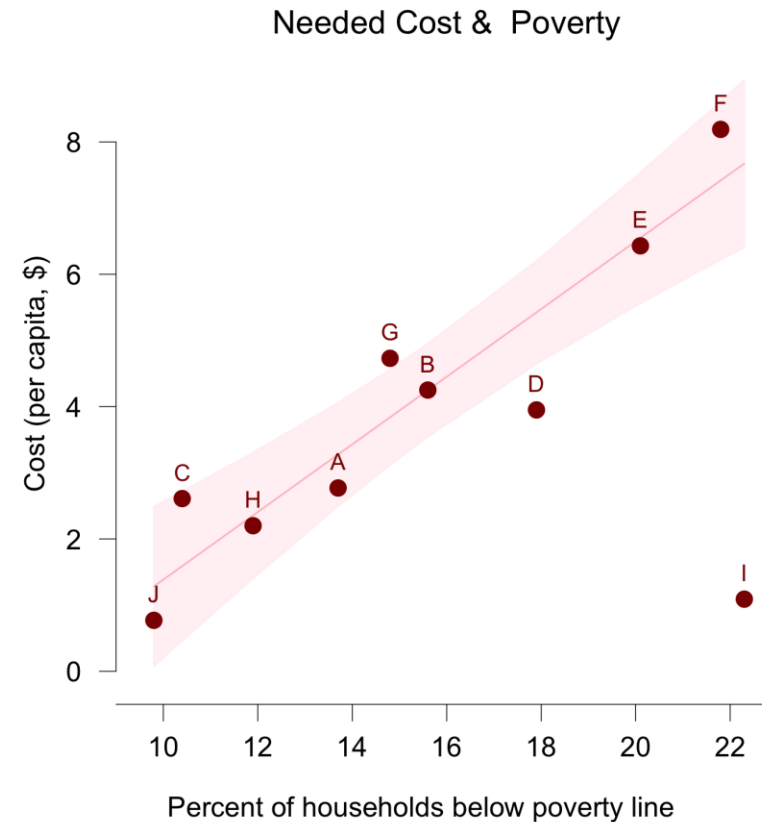
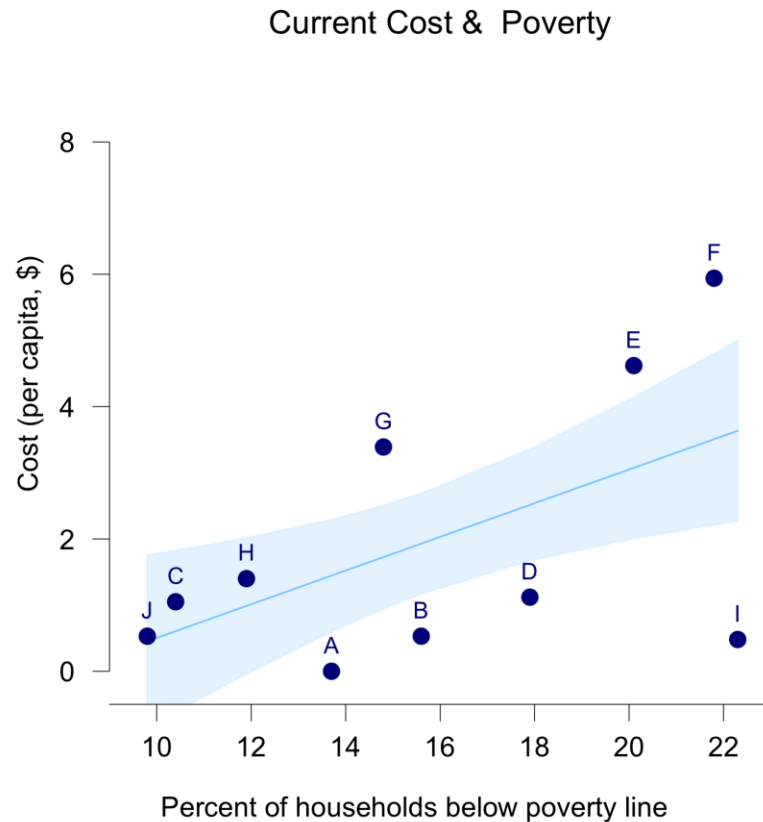
Unit Costs Vary Across LHJs

	WA County LHJ1	WA County LHJ2
FPHS Element II.A.4 Costs (CD - STI)	\$119,058	\$15,703
STI Contacts Followed, 2012	663	29
Cost/Case Followed	\$179.57	\$541.48



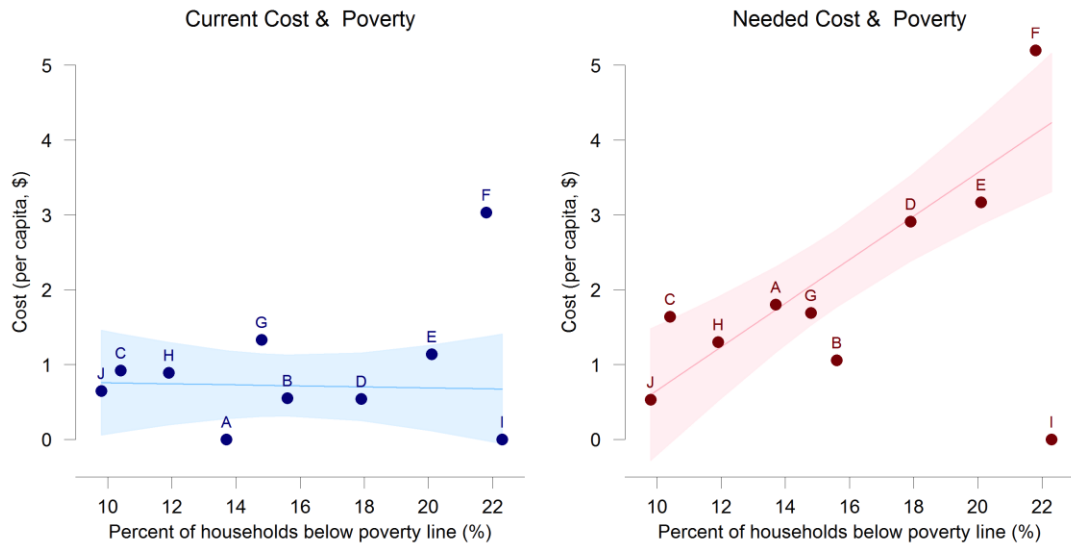
Costs Vary Across LHJs – Why?

Current and Needed Costs on Chronic Disease and Injury Prevention
by Poverty Level as Reported by Ten WA LHJs

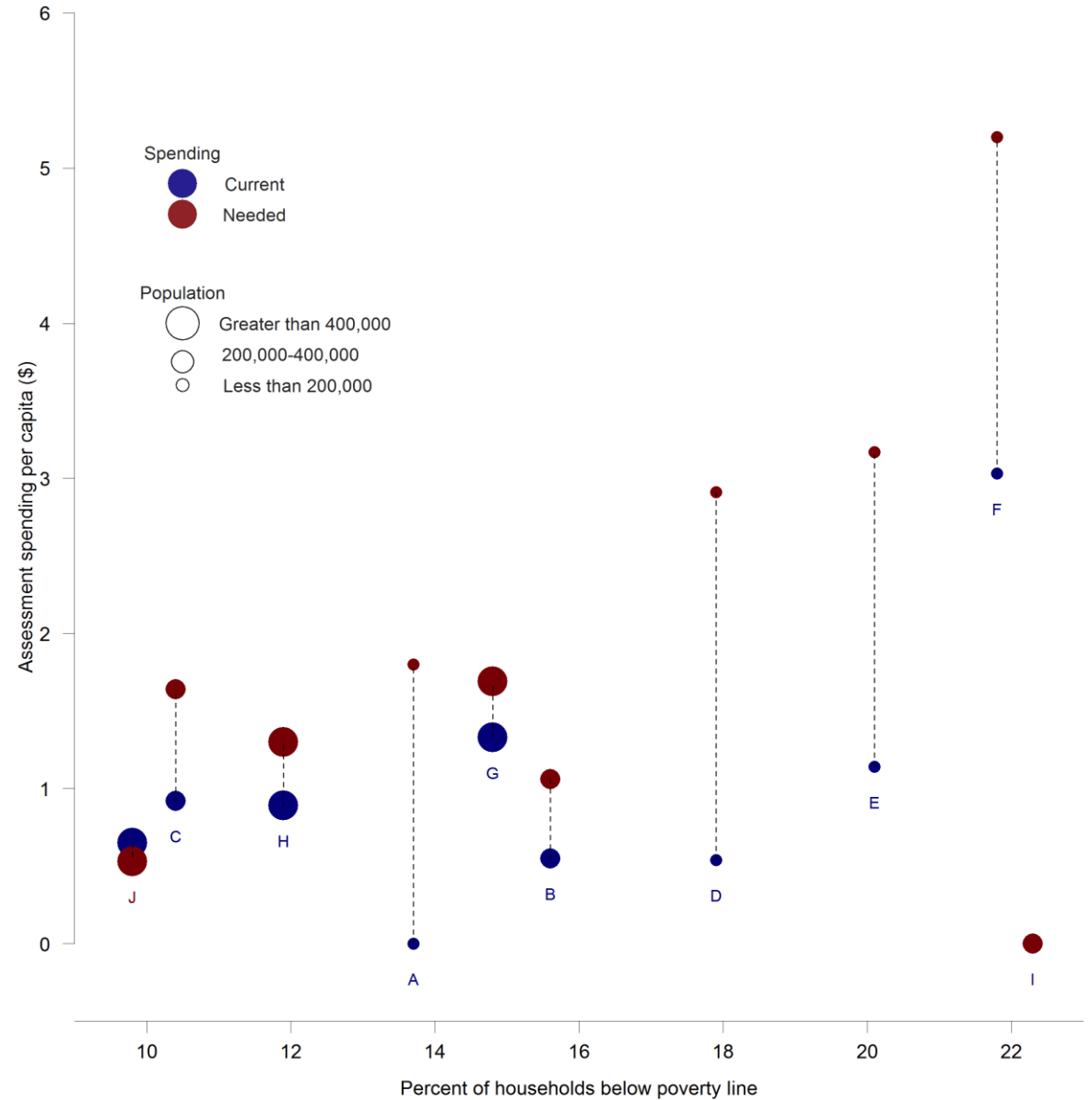


The Gap Also Varies – Why?

Current and Needed Costs on Public Health Assessment by Poverty Level as Reported by Ten WA LHJs



Current and Needed Spending on Public Health Assessment by Poverty Level as Reported by Ten WA LHJs

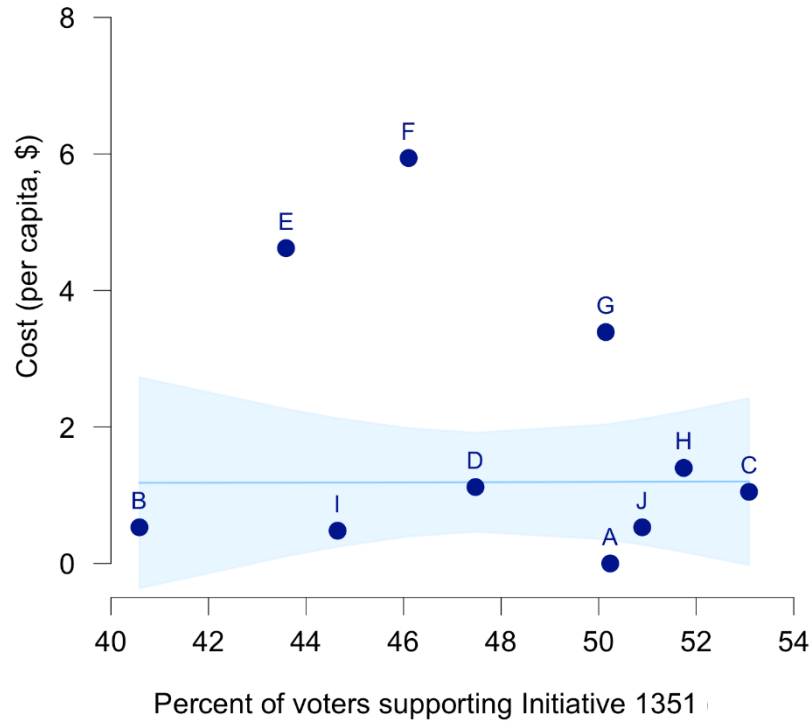


Another Explanation for Variation in the Gap

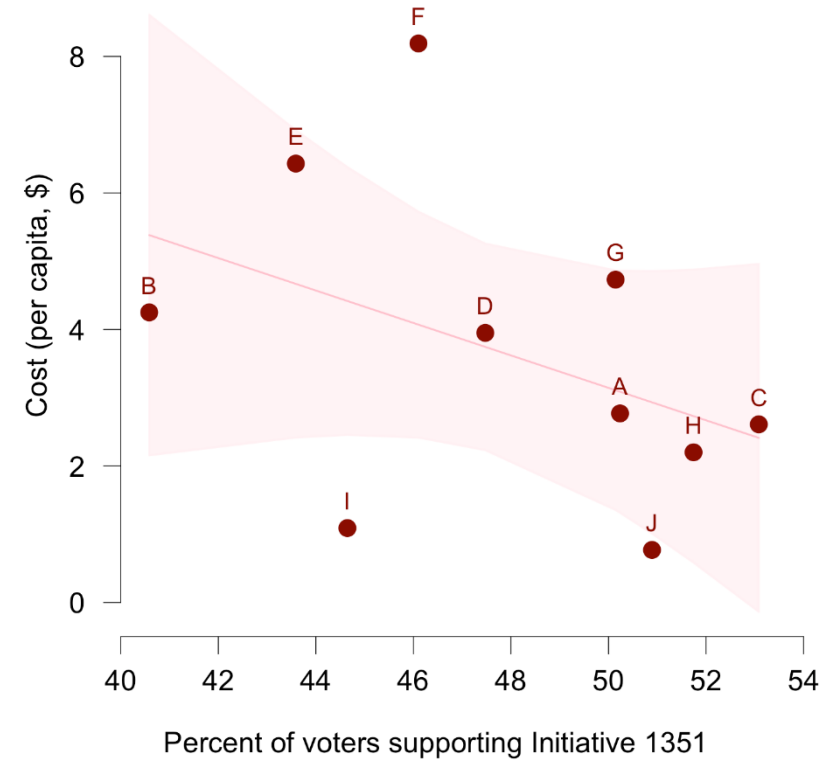
**Initiative 1351:
To Reduce Class Sizes in
Public Schools**

Current and Needed Costs on Chronic Disease and Injury Prevention
by Political Inclination by Ten WA LHJs

Current Cost & Political Inclination



Needed Cost & Political Inclination



Limitations

- Unit costs may affect spending, which may affect outcomes, which may affect costs!
- Differing perceptions of *Instrument* data definitions
- Estimates needed for breaking down FTEs among specific duties
- Potential for data errors
- No consistent, direct measure of “actual” funding needs



Implications

- Expanded & growing research nationally with our *Cost Estimation Instrument*
- Data & evidence needed for educating public & policy-makers

Data visualizations with participants

If what we're comparing is investment & engagement ... in the types of things we've been filling out [in this data collection instrument], it would tell the story of strategy & philosophy. Across the state, comparing one or another of us [LHJs], can be useful... I'd like to know [for example] how we do against [X] county? What is it they are able or not able to do, particularly with respect to foundational services – things that are supposed to be available everywhere. What's the funding that's driving the difference between like-sized departments, vs ideology?



Practice Applications

- State-wide
 - “Triangulation” of DACS data with data collected in 2014
 - Include DACS data to continue to improve state-wide estimates
 - These findings will add information to crucial statewide policy discussions
- Locally
 - Opportunities for comparisons
 - Can generate questions to ask of one another regarding differences in practice
 - Quality improvement opportunities

