

**The Emerging Crisis
of Aged Homelessness:
Could Housing Solutions Be
Funded by Avoidance of
Excess Shelter, Hospital, and
Nursing Home Costs?**

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County of Los Angeles

California Office of Statewide Health Planning and Development

MassHealth

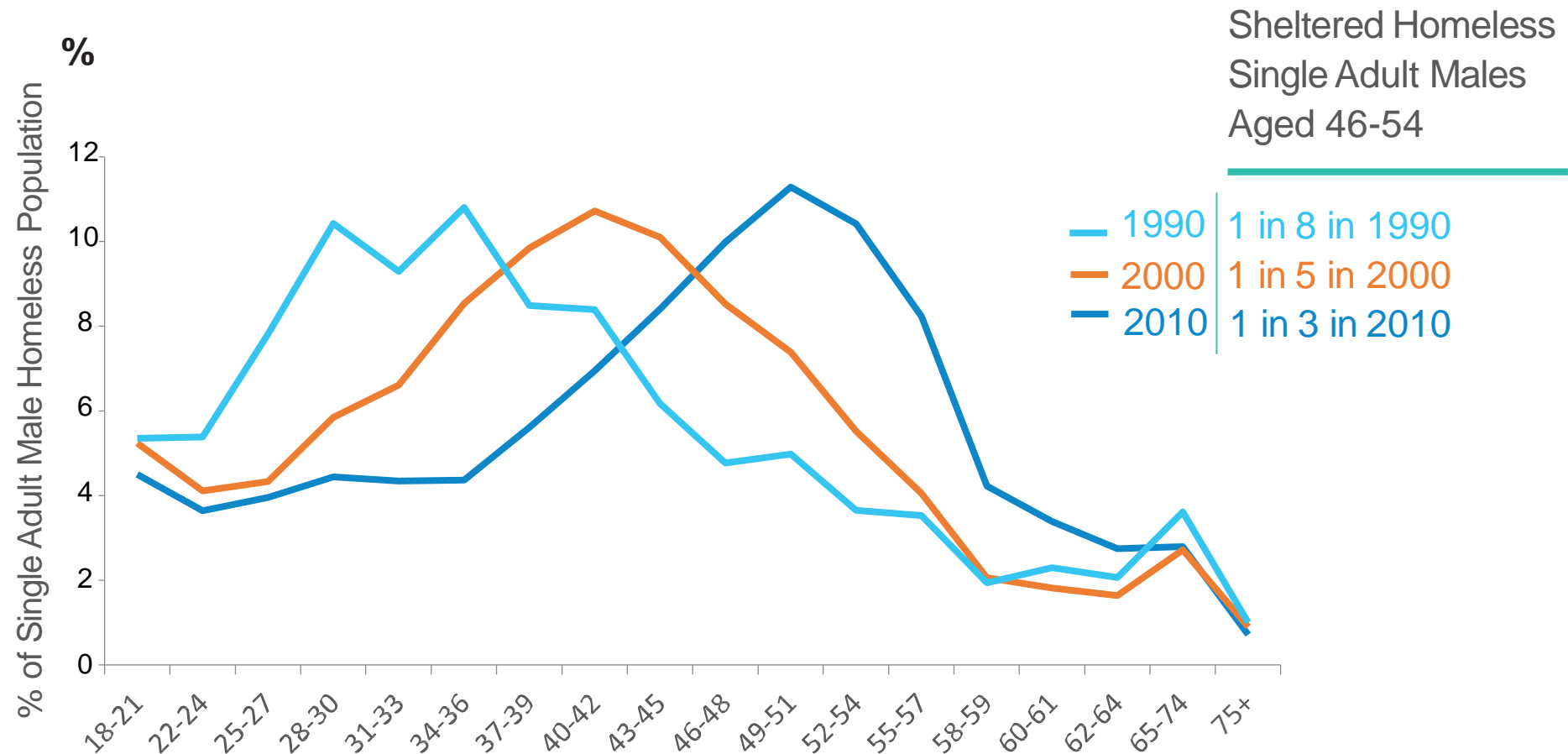
Boston Department of Neighborhood Development

Agenda for Presentation

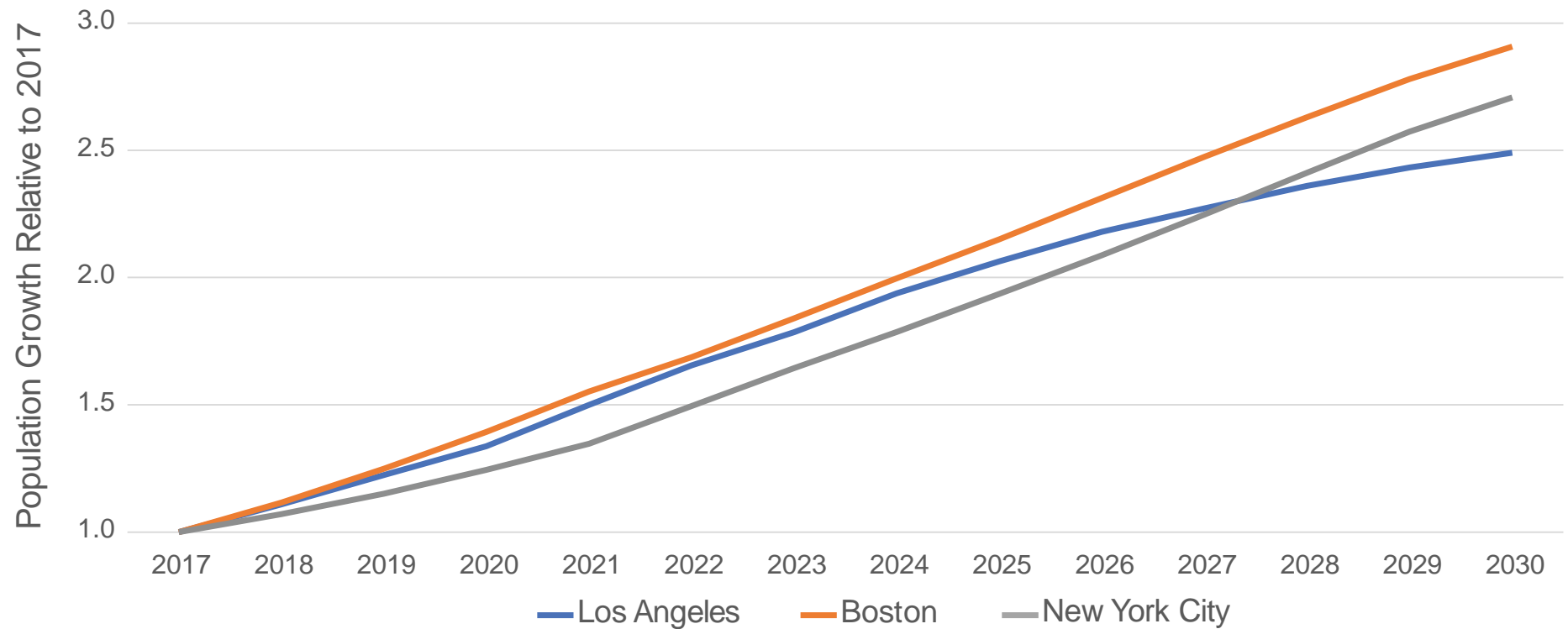
- Projections of the Aging Homeless Population
- Understanding Healthcare Service Usage of Older Homeless Adults
- Identifying Subgroups by Shelter & Healthcare Service Use
- Identifying Potential Cost Offsets
- Considering Stakeholders & Possible Next Steps

Homelessness, A Birth Cohort Phenomenon

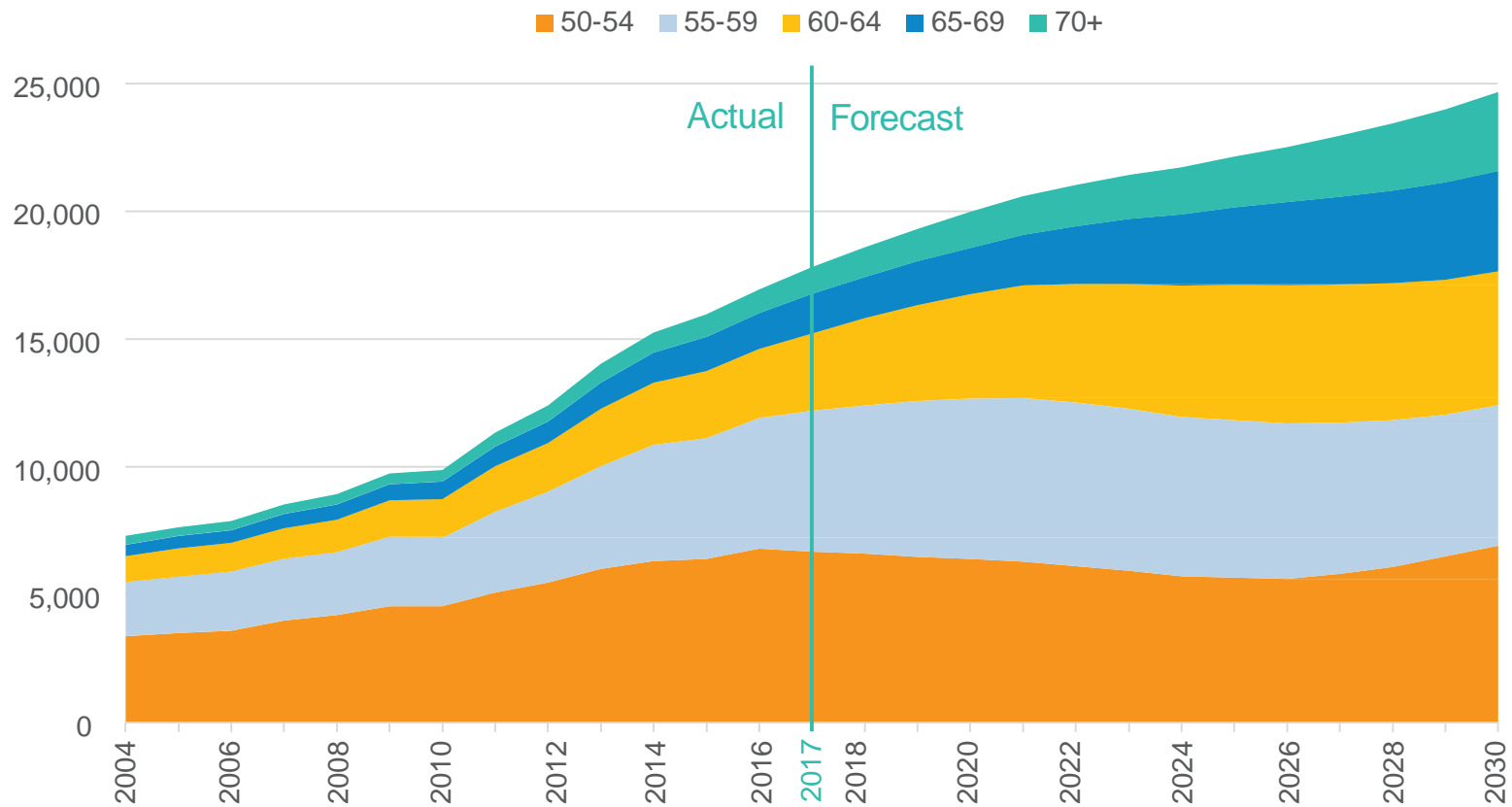
Single Adult Male Shelter Users, United States



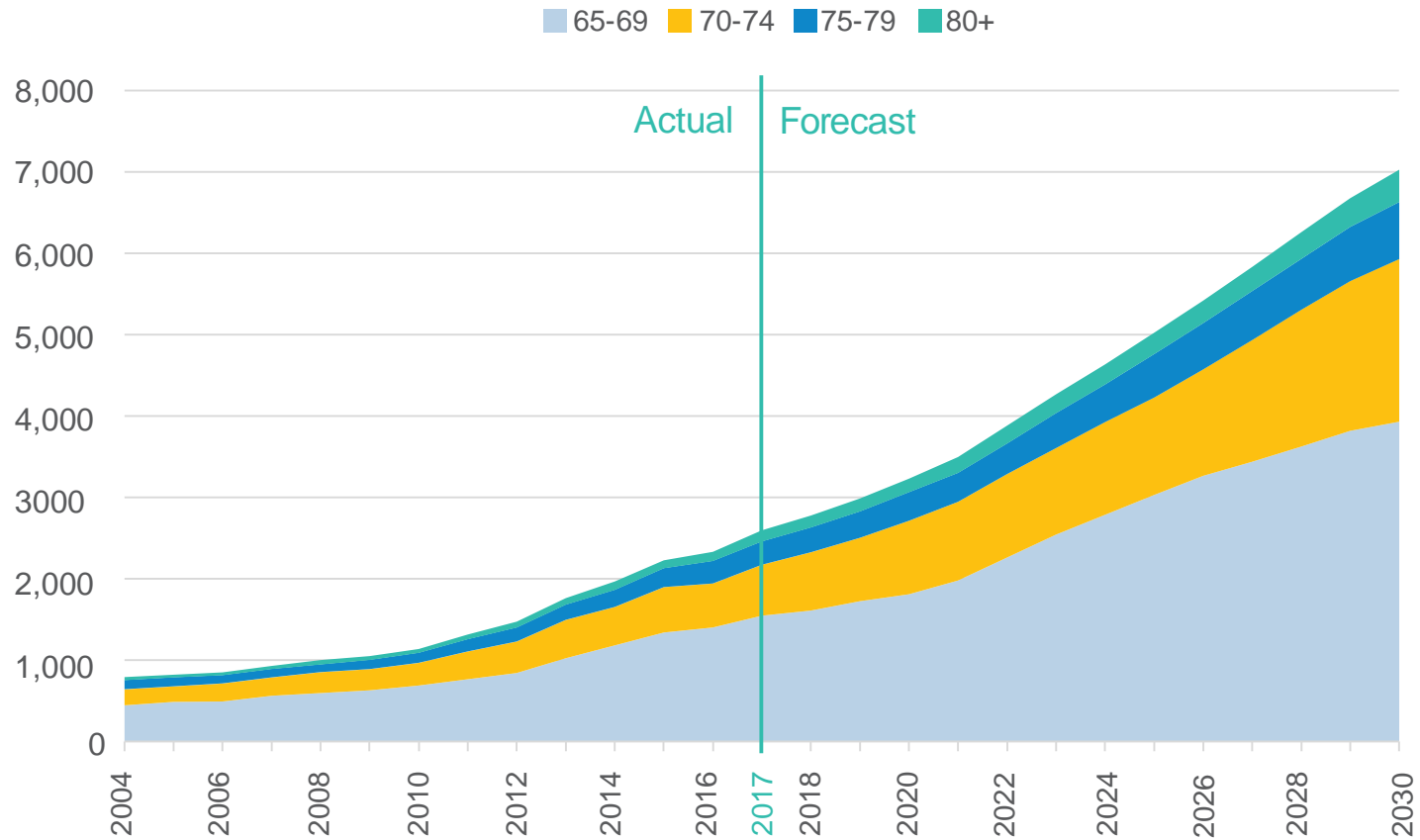
Forecasting Change in 65+ Homeless Population



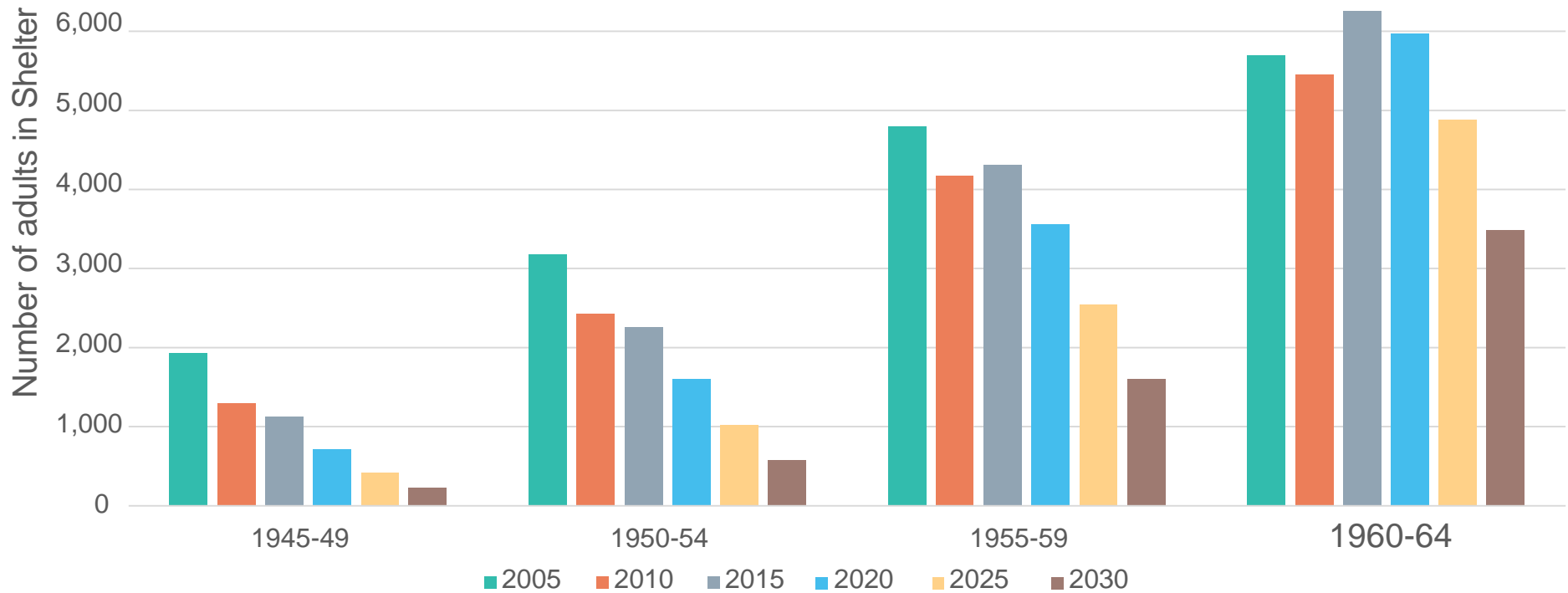
NYC Age 50+ Shelter population forecast



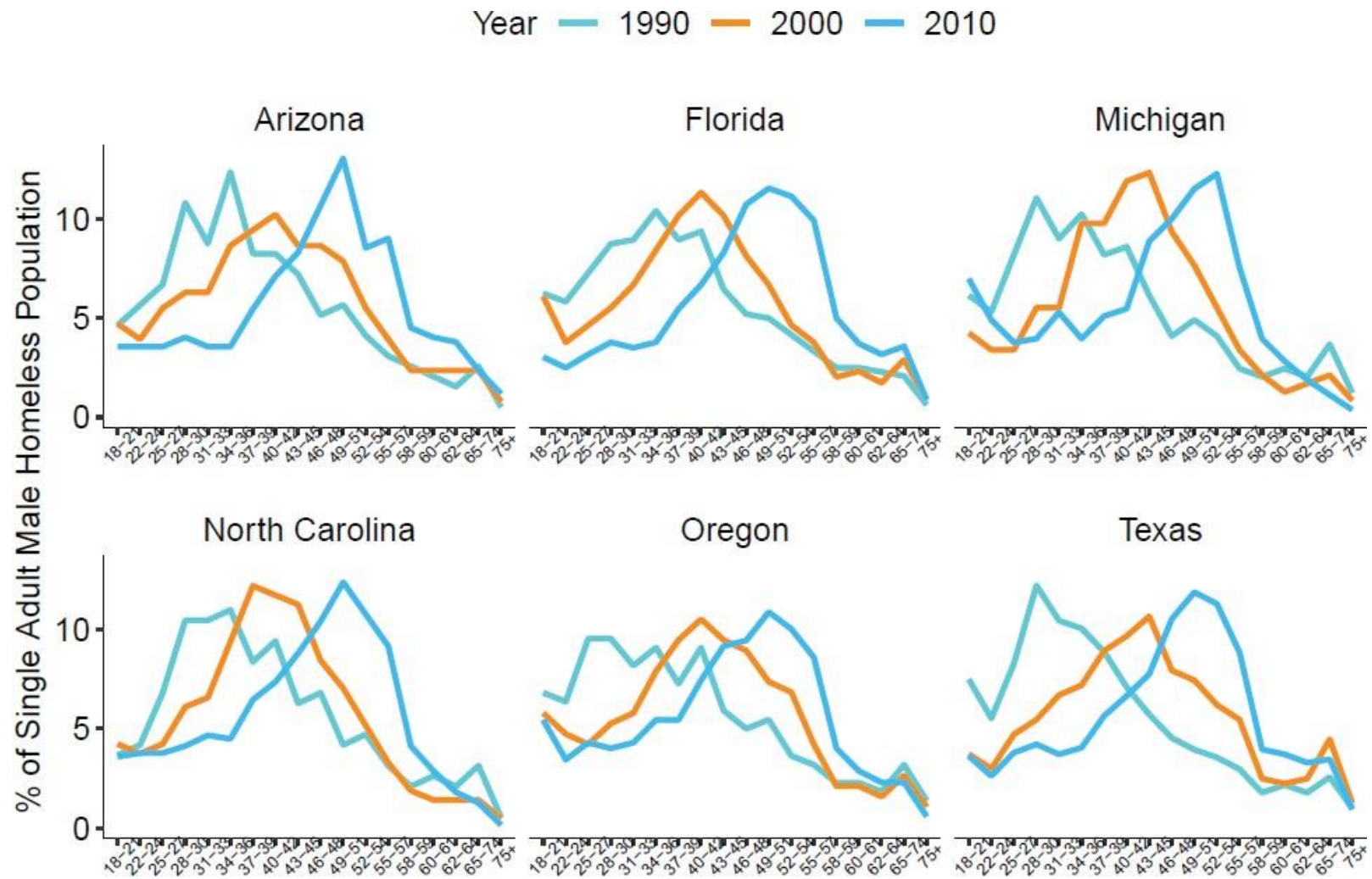
NYC Age 65+ Shelter population forecast



Change in Shelter Population for 5-Year Birth Cohorts: New York City, 2005 - 2030



Aging Homelessness Trends Across U.S

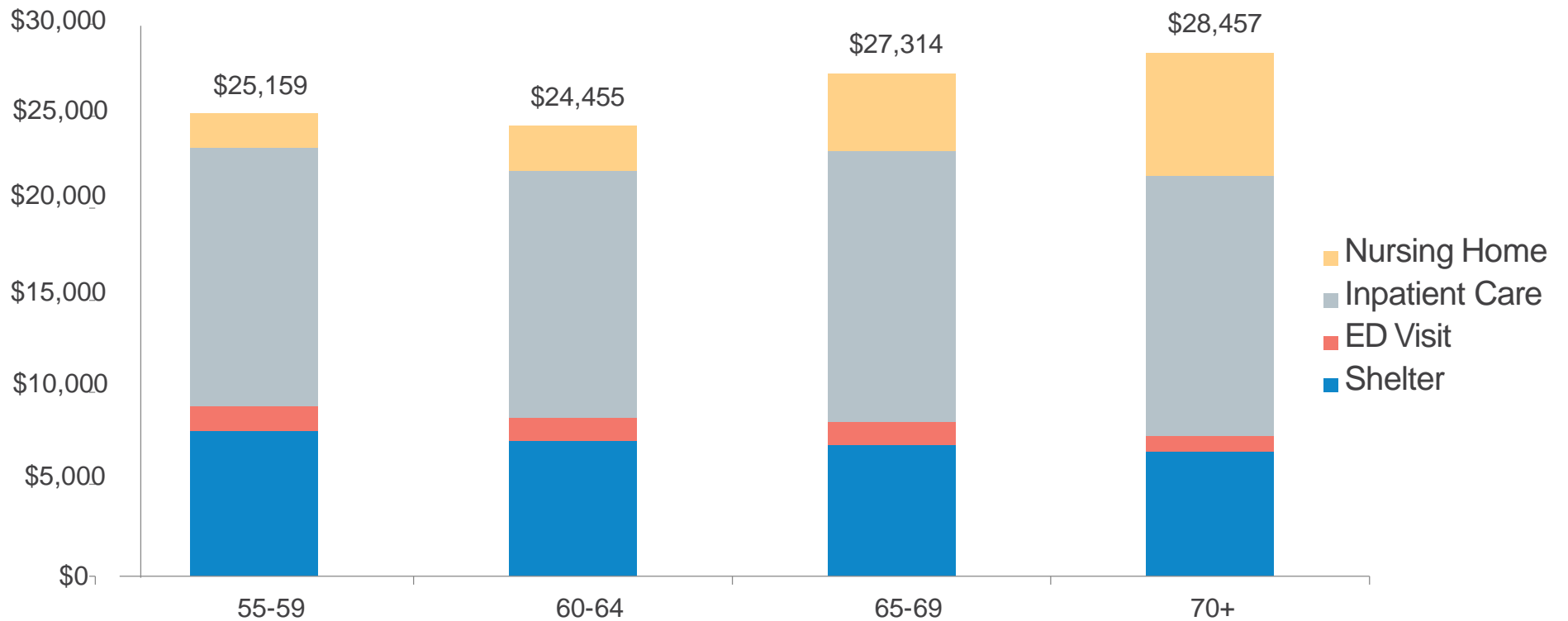


Examining Shelter, Healthcare, and Nursing Home Use & Costs of Older Homeless Adults

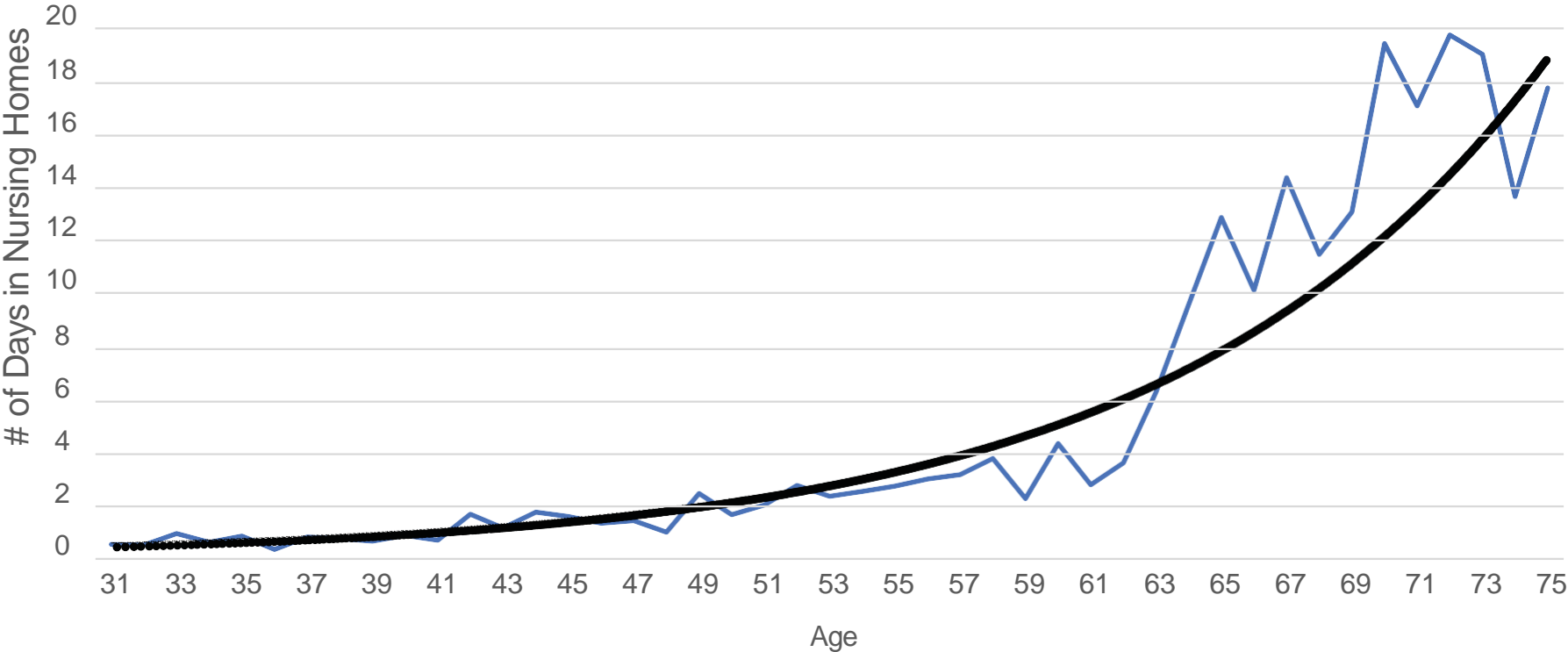
Data Sources

- **Boston**
 - **Shelter:** City of Boston HMIS
 - **Health care:** MassHealth Medicaid Claims
- **Los Angeles**
 - **Shelter:** Los Angeles Homeless Services Authority & Point-in-Time Count
 - **Health care:** LA Enterprise Linkage Project (Departments of Public Health, Mental Health, & Health Services), CMS (through Mission Analytics); California Office of Statewide Healthcare Planning & Development
- **New York City**
 - **Shelter:** NYC Department of Social Services
 - **Health care:** NYS Department of Health SPARCS Database, CMS (through Mission Analytics)

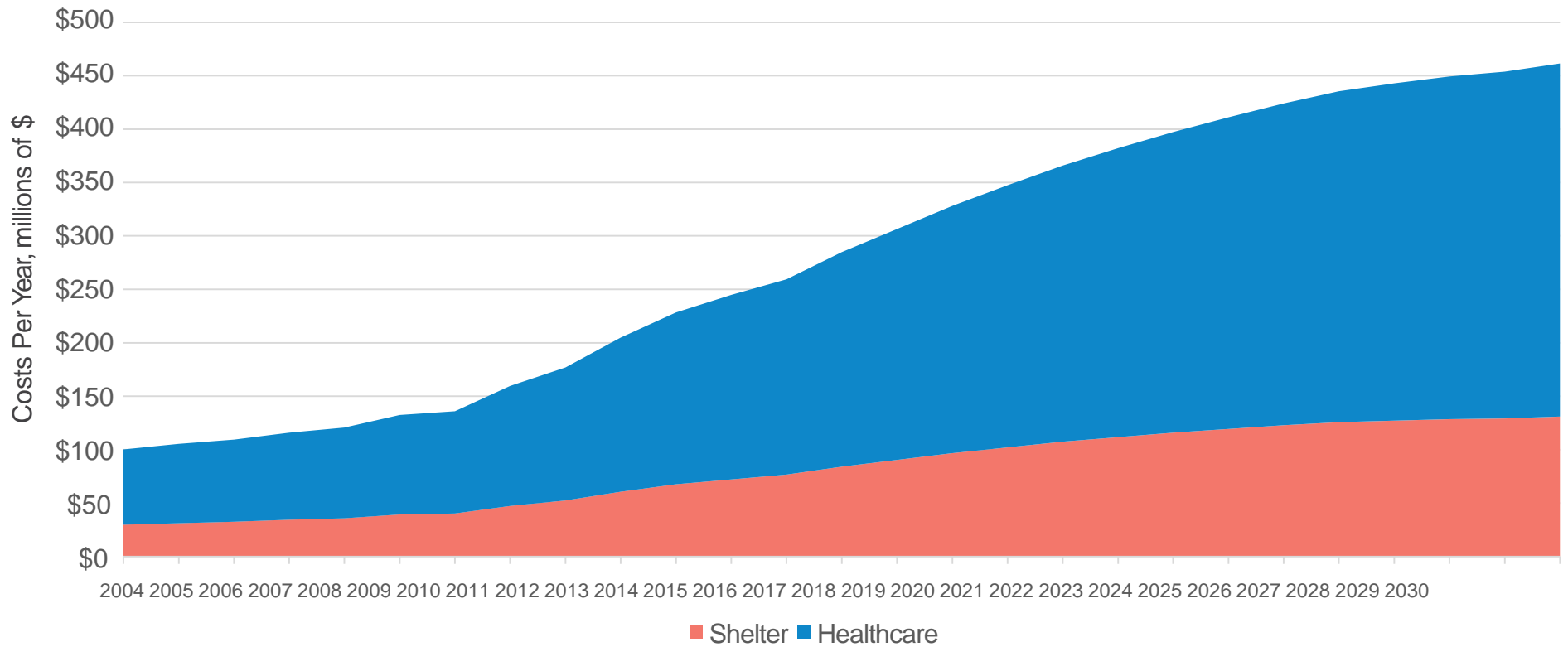
Average Annual Per Person Costs by Age: New York City



Nursing Home Use by Age: LA County



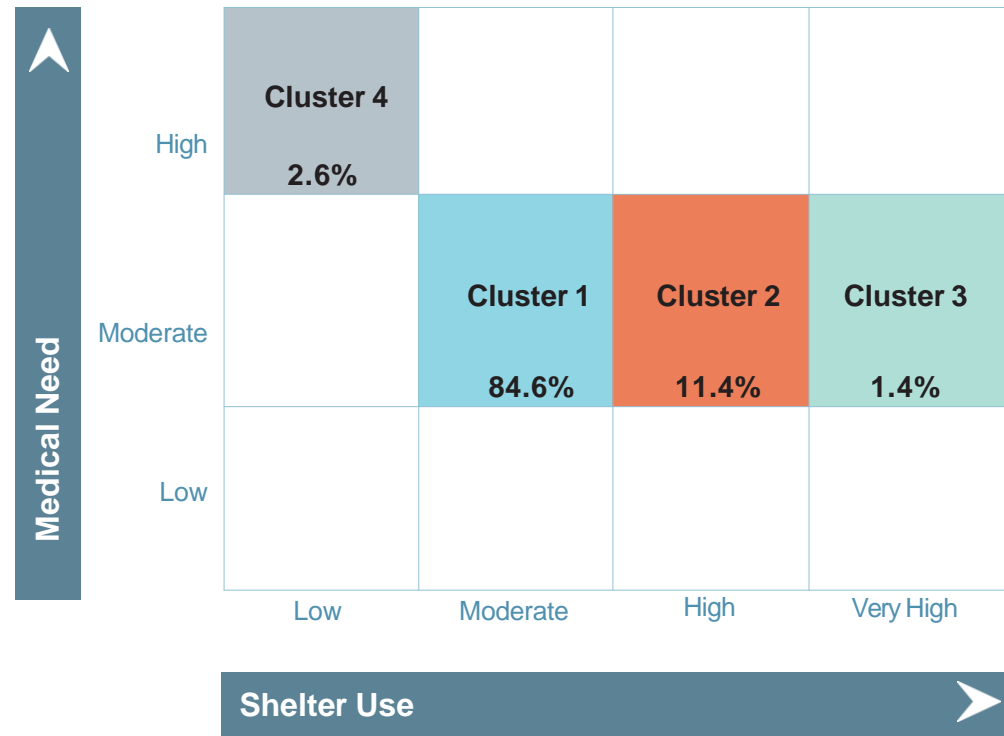
Projecting Total Costs through 2030: New York City



Segmenting into Subgroups to Assess Potential Housing & Service Needs

- Cluster Analysis: A tool for grouping observations based on similarities and dissimilarities
- Clusters were created based on a small set of variables, and validity was assessed through other variables of service use and medical acuity

Subgroup Analysis Results



Cluster Description	Cluster Share	Shelter Days 2009 - 2015	Gagne Comorbidity Index	Inpatient Hospital Days 2011 - 2015
1 Moderate shelter use, Moderate medical need	11,354 (84.6%)	270	2.2	16
2 High shelter use, Moderate medical need	1,536 (11.4%)	1,191	3.1	20
3 Very high shelter use, Moderate medical need	193 (1.4%)	2,201	1.9	14
4 Low shelter use, High medical need	344 (2.6%)	56	32.5	253

Subgroups: Annualized Shelter & Healthcare Use

	Shelter Days	Inpatient Days	ED Visits	Nursing Home Days	Shelter Cost	Health Services Cost	Total Services Cost
Cluster 1	44	3	1	9	\$5,167	\$13,369	\$18,536
Cluster 2	196	4	2	6	\$23,018	\$15,870	\$38,888
Cluster 3	329	3	1	3	\$38,638	\$10,281	\$48,919
Cluster 4	9	51	10	32	\$1,075	\$175,437	\$176,494

Medical Need	4			
	1	2	3	
Shelter Use				

Envisioning a Continuum of Potential Interventions

Subgroups 2, 3, and 4: Permanent Supportive Housing

Medical Need ▲	4			
		1	2	3
Shelter Use ▶				

- Long-term housing + supportive services for chronically homeless populations
- All three groups may need advanced case management and home care services that allow for aging in place
- Subgroup 4 are likely candidates for palliative care and additional nursing home transition services

Estimating Costs for Each Intervention

Intervention		Annual Housing Cost	Annual Service Cost	Total Annual Cost
Cluster 1	Subsidy + Services	\$4,795	\$1,650	\$6,444
Cluster 2	PSH	\$15,468	\$11,500	\$26,968
Cluster 3	PSH	\$15,468	\$11,500	\$26,968
Cluster 4	PSH + Additional Supports	\$15,468	\$23,000	\$38,468

Medical Need ▲	4			
		1	2	3
Shelter Use		➤		

Estimating Service Cost Reductions

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2. Basu A, Kee R, Buchanan D, Sadowski LS. Comparative cost analysis of housing and case management program for chronically ill homeless adults compared to usual care. *Health Serv Res*. 2012;47(1 Pt 2):523-543.
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7. Gilmer T, Manning W, Ettner S. A Cost Analysis of San Diego County's REACH Program for Homeless Persons. *Psychiatr Serv*. 2009.
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9. Martinez TE, Burt MR. Impact of permanent supportive housing on the use of acute care health services by homeless adults. *Psychiatr Serv*. 2006;57(7):992-999.
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11. Srebnik D, Connor T, Sylla L. A pilot study of the impact of housing first-supported housing for intensive users of medical hospitalization and sobering services. *Am J Public Health*. 2013;103(2):316-321.
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13. Mares AS, Rosenheck RA. Twelve-Month Client Outcomes and Service Use in a Multisite Project for Chronically Homelessness Adults.
14. Thomas LM, Shears JK, Pate MC, Priester MA. Moore Place Permanent Supportive Housing Evaluation Study Final Report. Charlotte, NC

Service Cost Reduction Scenarios

– Scenario 1

More conservative

Based on a pooled average of the percentage change in health care costs associated with housing placement that were observed in all studies that were reviewed. Studies were weighted so those with stronger methodological rigor had larger weights and greater impact on the pooled average.

– Scenario 2

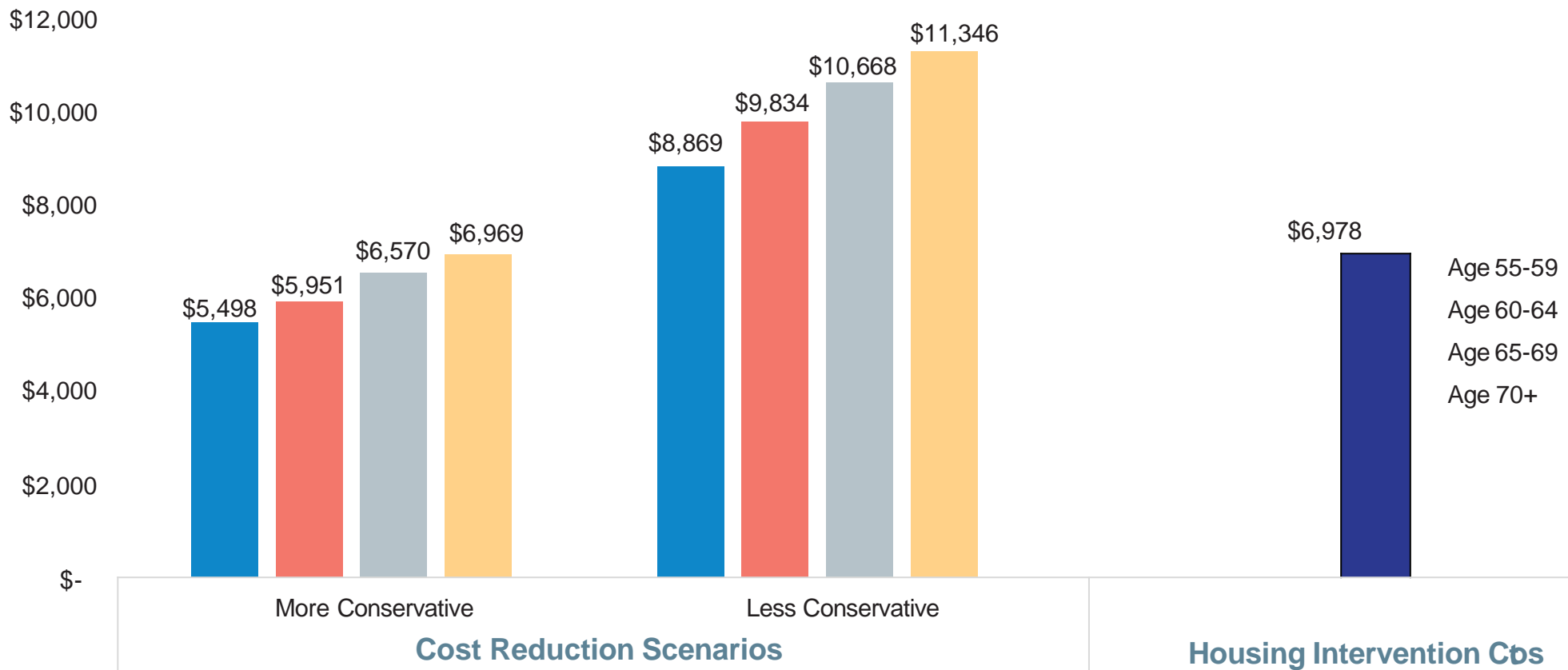
Less conservative

Based on a pooled average of the percentage change in health care costs associated with housing placement that were observed in all studies that identified a significant reduction in health care costs.

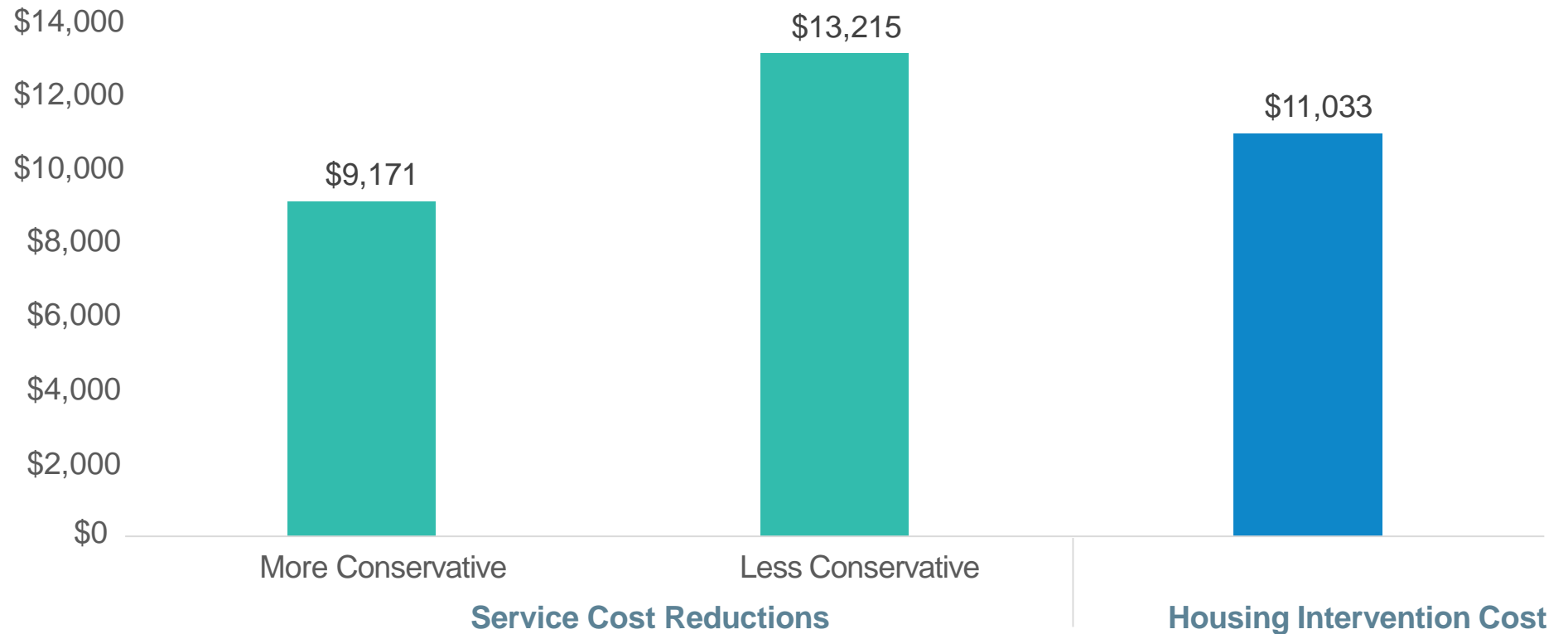
A Range of Potential Service Cost Reductions

Cost Category	Scenario 1 (More conservative)	Scenario 2 (Less conservative)
Inpatient medical	-18%	-33%
Emergency Department	-6%	-45%
Outpatient medical	-6%	-45%
Outpatient behavioral health	48%	-29%
Inpatient behavioral health	-35%	-56%
Nursing home	-42%	-90%
Shelter	-71%	-71%

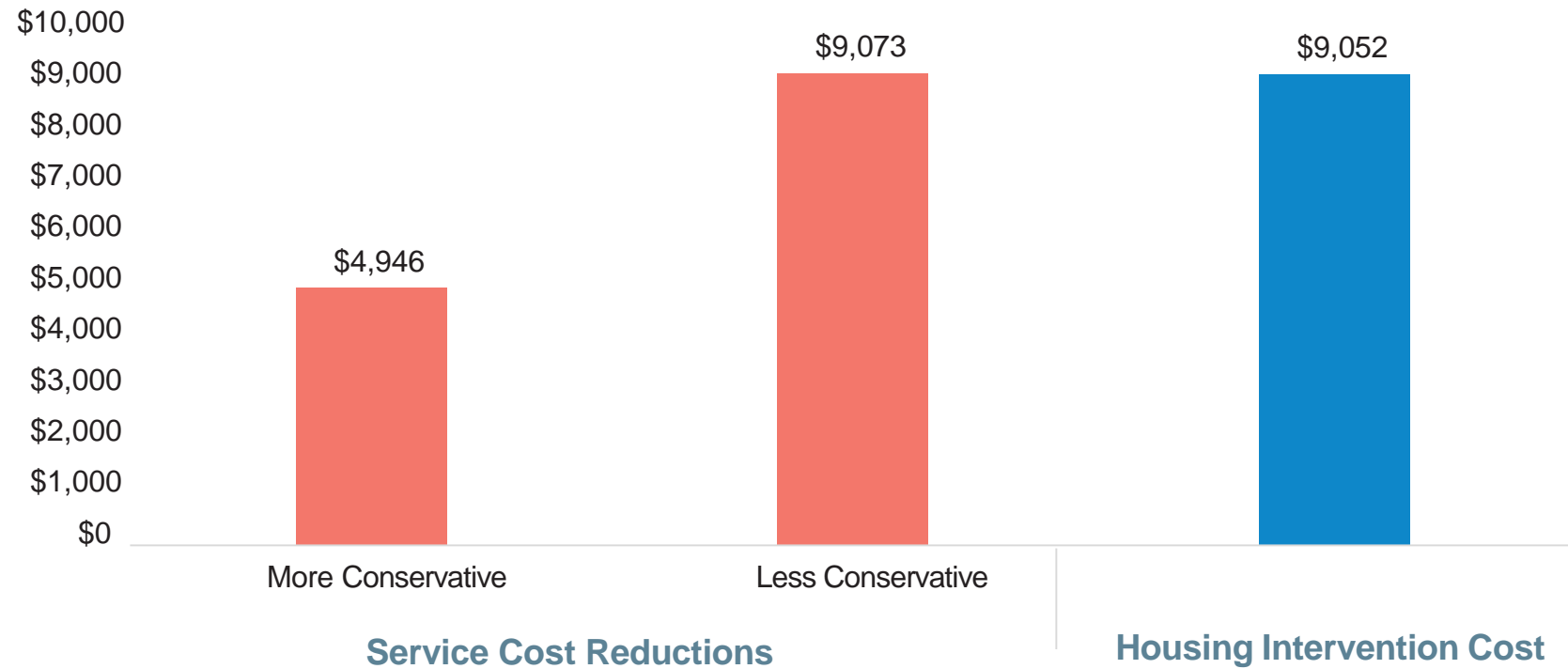
Cost Reduction Possibilities by Age Group: LA County Average per Person Per Year



Cost Reduction Possibilities in NYC Average Per Person Per Year



Cost Reduction Possibilities in Boston Average Per Person Per Year



Annualized Average Projected Costs & Potential Cost Reductions (in millions of \$)

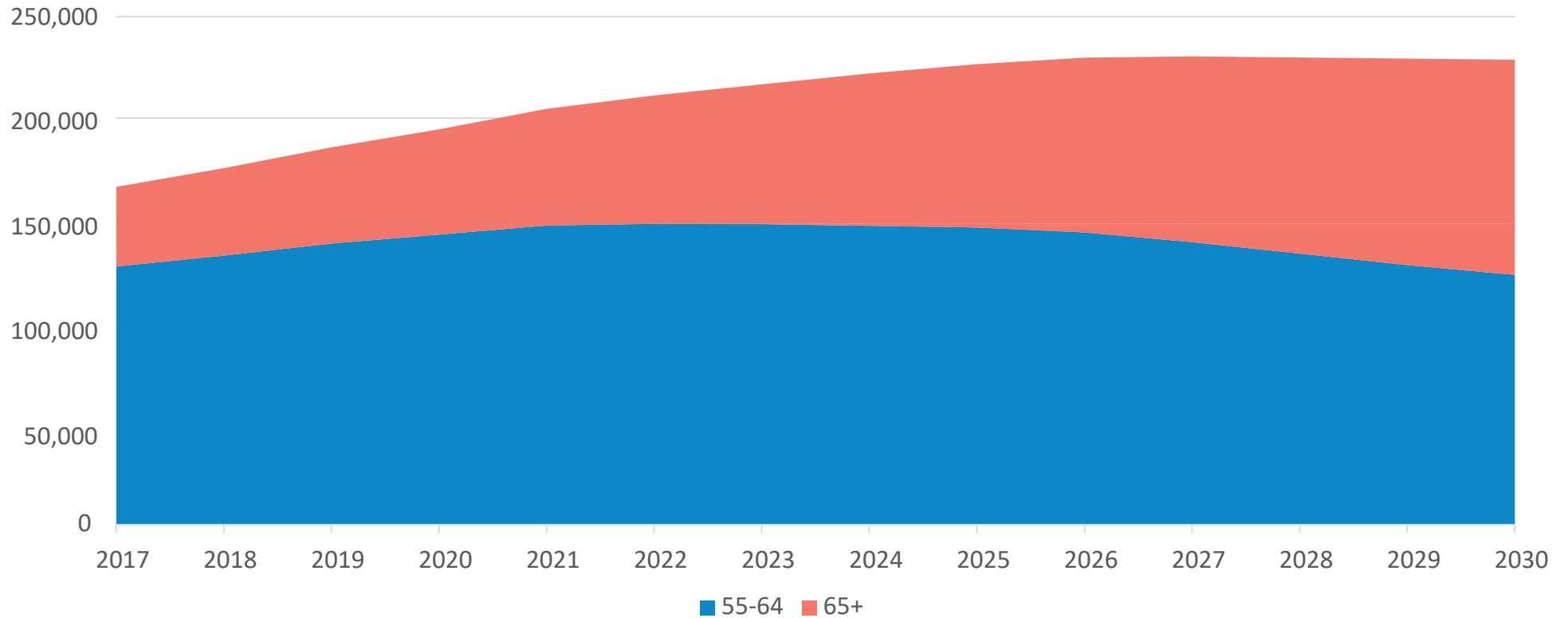
	Service Costs without an Intervention	Intervention Costs	Average Service Cost Reductions	Net Offsets (Service Cost Reductions - Intervention Costs)	Return Per Dollar Spent
New York City	\$408	\$157	\$177	\$20	1.13
Boston*	\$67	\$39	\$30	(\$9)	0.77
LA County	\$621	\$241	\$274	\$33	1.14

* Boston service costs and cost reductions exclude Medicare-reimbursed services. A forthcoming analysis estimating Medicare costs suggests that an intervention would be break-even or provide net savings

**Could
Housing Solutions be Funded by
Resultant Service Cost Reductions?**

Yes

National Projections (with cautions)



Key Stakeholders

U.S. HUD & VA

U.S. DHHS – CMS

State Medicaid Regulatory Agencies

Medicaid Managed Care Organizations

Hospitals & nursing homes

Homeless Service Providers (CoC's)

Housing Authorities

Local Area Agencies on Aging

Policy Considerations

- How to advance fund the housing “investment”?
- MCOs as rapid rehousing funder under a critical time intervention model?
- Start now targeting hospital and ER discharges and nursing home diversion?
- Ramp up over time, starting with 65+ or 62+ to gain momentum and develop policies and procedures?
- Federal challenge grant program to states for pilots?
- Local/state pay for shallow subsidies as alternative to shelter, and sunseting over time?
- Hospitals as key local leaders and conveners? Dissuade from “medical respite” push?