Santa Clara University



DATA-DRIVEN STRATEGIES TO INCREASE THE MARKET SHARE OF UNION INSIDE ELECTRICAL CONTRACTORS

Progress Report ELECTRI Council Meeting

Denver, CO July 16, 2019

Hisham Said

Associate Professor Santa Clara University



Work Plan



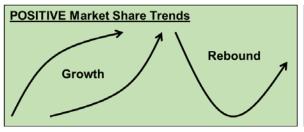
Tasks/Events		Timeline				
		Α	M	J	J	Α
Taskforce Formation and Kickoff Meeting 100% Complete						
Task (1) Research and Adopt LU-level electrical construction market metrics 100% Complete	<	1>				
Task (2) Interview NECA local chapters and contractors 90% Complete				<	2	
Task (3) Survey the NECA local chapters for their market share levels and attributes 90% Complete				<	3	
Task (4) Identify the correlation between the market share levels and determinates 90% Complete						
Task (5) Develop the market share growth playbook 60% Complete						4>
Present to the ELECTRI Council the preliminary findings (Denver, CO) 0% Complete						
Task (6) Document and disseminate the study findings 60% Complete						<



Project Deliverable

Task (1) Research and adopt LU-level market share metrics

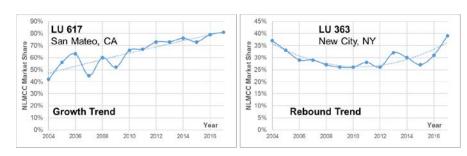
- NLMCC Data: 262 Locals.
- Market Share Trend New Classification Metric:

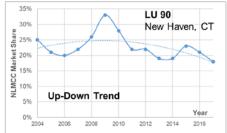


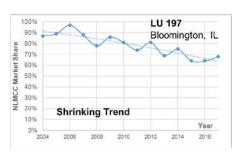


- ☐ The NLMCC market share 2004-2017 data were analyzed using a trend analysis algorithm for all 262 locals.
 - Shrinking Trends =
 - Rebound Trends =
 - Up-down Trends =
 - Growth Trends =

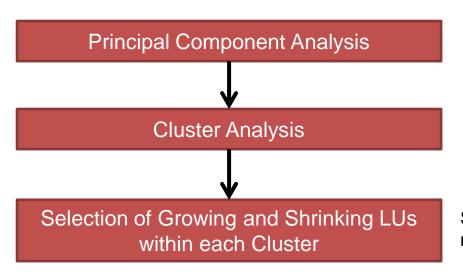
- 24 LUs (9%)
- 120 LUs (46%)
 - 73 LUs (28%)
 - 45 LUs (17%)







- ☐ Town hall meetings:
 - 1. San Diego Chapter, March 28
 - 2. Santa Clara Valley Chapter, April 10
 - 3. North Florida & Central Florida chapters, May 9th
- Town hall meetings were very useful for initial data collection.
- Interviews provide more focused and detailed data collection.
- ☐ How to select the LU for the interviews?









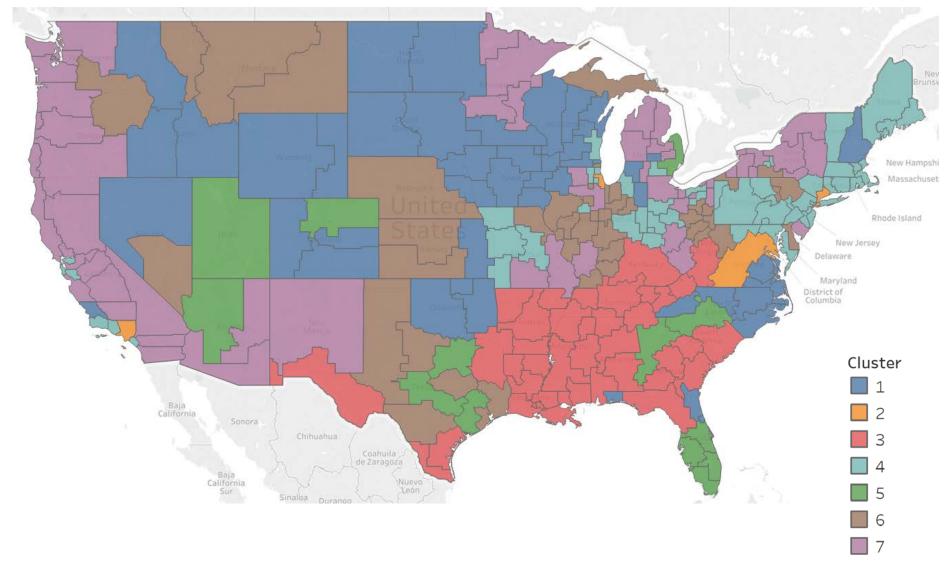
Simplify the analysis from 20 social, economic and workforce variables to fewer latent variables

Use the fewer latent variables to cluster the local unions (LUs)

Select the LUs with growing and shrinking market share trends for the interviews

Initial Variables	Latent Variables (Principal Components)
 (+) Local Population (+) Local Building Permits (+) Employment (residential, commercial, industrial, electrical construction) (+) Number of contractors (residential, commercial, industrial, electrical construction) 	Market Size
 (-) Poverty Rate (-) People with less than a high-school degree (-) Unemployment Rate (+) People with Bachelor degree or higher 	Social Welfare
 (+) Average 2004 – 2017 Union Market Share (+) Minimum Wage (+) Prevailing Wage (-) Right to Work (RTW) Laws 	Pro-Union Environment
 (+) People with some college or Associate degree (+) Minimum Wage 	Trade Recuirement Potential
Gross Domestic Product (GDP)	Economic Development





Sample LU included in the Interviews

Interviews done mostly with

NECA managers, and some

IBEW Business Managers

No	Cluster	Chapter	Location	LU	Trend
1	1	Greater Sac	Reno, NV	401	Growth
2	1	Nebraska	Omaha, NE	22	Growth
3	1	Central Indiana	Fort Wayne, IN	305	Growth
4	1	Wisconsin	Stevens Point, WI	388	Growth
5	2	New York City	New York, NY	3	Shrinkage
6	2	Chicago	Chicago, IL	134	Shrinkage**
7	3	WV-OV	Charleston, WV	466	Shrinkage
8	3	Gulf Coast	Sheffield, AL	558	Shrinkage
9	3	S. Louisiana	New Orleans, LA	130	Growth
10	4	Boston	Portland, ME	567	Shrinkage
11	4	Illinois	Bloomington, IL	197	Shrinkage
12	4	Central Indiana	Muncie, IN	855	Growth
13	5	Atlanta	Atlanta, GA	613	Growth
14	5	Atlantic Coast	Charlotte, NC	379	Growth
15	6	NE Illinois	Aurora, IL	461	Shrinkage
16	6	WV-OV	Marietta, OH	972	Growth
17	7	Nor-Cal	Dublin, CA	595	Shrinkage
18	7	SW - WA	Tacoma, WA	76	Shrinkage
19	7	Puget Sound	Seattle, WA	46	Growth
20	7	Monterey Bay	Castroville, CA	234	Growth
21	7	Greater Sac	Sacramento	340	Up-down

^{**} NLMCC shows a growth trend, but Chicago chapter did not agree with that.



Task (3) Online Survey

- □ Initial version of the survey was cut to a shorter survey to increase the response rate.
- □ Different sections for NECA executives, IBEW managers, and contractors.
- □ 66 Responses :
 - o 24 contractors

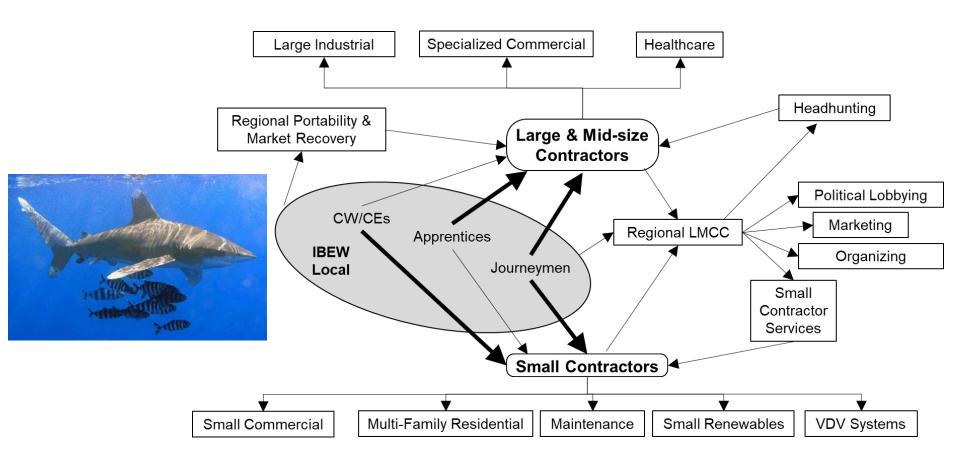
0	38 NECA executives	2	101	207	E0.4
O	30 INLOA executives	3	134	307	584
_	4 IBEW/JATC	20	158	342	606
0	4 IDE W/JATO	22	159	363	640
		25	177	379	648
		34	197	388	701
	Responses	43	212	428	714
	•	48	234	440	776
	related to 53	60	238	449	840
	Locals	68	246	477	855
		73	265	518	890
		86	291	520	969
		100	301	540	
		112	305	553	
		127	306	569	



- 1) Industry Segments
- 2) Mega Projects
- 3) Low-voltage & Automation
- 4) IBEW Membership
- 5) Project Labor Agreements (PLAs)
- 6) National Maintenance Agreement
- 7) Crew Ratios
- 8) CW/CE
- 9) Portability
- 10) Market Recovery Agreements
- 11) NECA-IBEW Relation



Need for a paradigm shift and a new ecosystem for union electrical construction





- 1. Establish regional portability agreements
- 2. Provide incentives and support system for union small contractors
- Advocate for uniform electrician licensing across intra-state metropolitan areas
- 4. Expand the use of CE/CWs
- 5. Balance between local and regional market recovery agreement
- 6. Merge local LMCC into regional LMCC
- 7. Merge unions in large metropolitan areas
- 8. Establish and support lobbying entities
- 9. Counter globalization with Global Framework Agreements
- 10. Implement proactive workforce recruitment and organizing initiatives
- 11. Increase organizing effort in the immigrant population

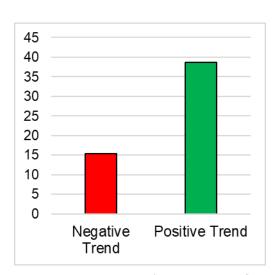


Provide incentives and support system for union small contractors

- ☐ Small contractors complete the union "eco-system" based on a fair and balanced mutualism setting.
- ☐ LMCC support and large contractors buy-in is critical.
- Incentives:
 - Grants to target specific industry or market (VDV, MWBE)
 - Membership waiving or discounts
 - Job targeting money in return of using CE/CWs.
 - Relaxed crew ratios
- ☐ Support services:
 - Estimating
 - Accounting
 - Office spaces
 - o Prefab & warehouse spaces
 - Marketing
 - Mentorship

"More emphasis needed on the small to medium sized shops to gain market share rather than trying to convert larger merit shops or winning more projects from larger merit shops."

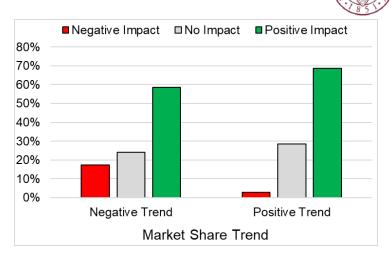
Survey Respondent



Average number of IBEW working members per 1 signatory contractor (Interview Data)

Establish regional portability agreements

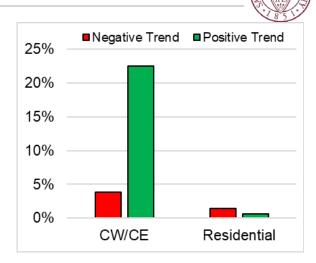
- ☐ Issues against portability:
 - Political (business manager election)
 - Portability-out draining local resources
 - Portability-in competition to local signatory contractors
 - Wages & Benefits
 - JATC training
- Levels of Portability beyond the National agreement:
 - Project-based Portability
 - 2. Key-Personnel Portability
 - 3. Open Specialized Portability (VDV, automation)
 - 4. Open Classification Portability
 - 5. Border-Line portability
- Regional portability expansion setup:
 - Stand-alone
 - Part of a "regional recovery agreement"



Impact of <u>Portability</u> on LUs with positive and negative market share trends
(Online Survey Data)

Expand the use of CE/CWs

- ☐ Clear correlation: the more CE/CWs are utilized, the more chance to have a positive market share trend.
- ☐ CE/CWs face "cultural" resistance from:
 - <u>Union</u>: stealing jobs from JIW and apprentices
 - Pre-con: estimating challenges and uncertainty
 - Field: more effort to supervise



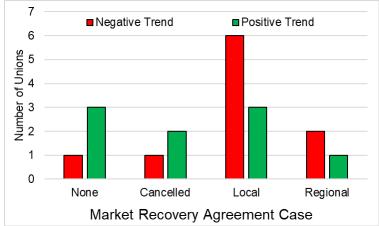
Current CE/CWs Obstacles	Approach	
Union resistance	Breaking the barrier and misconceptions through social activities	
Pre-con	Tie job-targeting to use of CE/CWs	
Field	Use CE/CWs in low-skill jobs (solar, prefab,)	
Licensing, Davis-Bacon, Prevailing Wage	Remove the limits on using CE/CWs in the work that does not	
Project size limit (SF, \$)	need state licensing or prevailing wage	
High open-shop wages	Accelerate JATC admission and advancement	

☐ Biggest impact: make CE/CWs category 1 contract language!

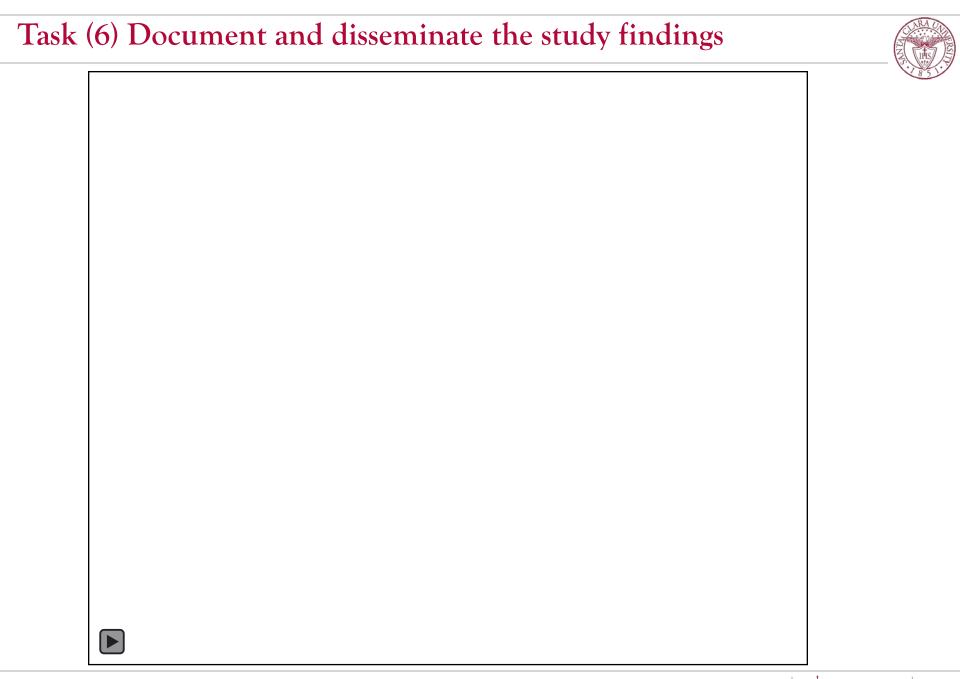


Balance between local and regional market recovery agreements

- Local recovery agreements may create wage disparities with the surrounding locals, and pushes union workers out of the disadvantaged union.
- Example regional agreements:
 - 4th District South West Regional Agreement
 - 5th District Market Recovery Addendum
 - South-Central Illinois Regional Agreement
 - Carolina's Inside Recovery Agreement
 - The Maine Initiative
 - Southern California Region Agreement



Regional Recovery Agreements	Local Recovery Agreements
Priority: increase the regional market share, by preferring traveling union over local open-shop.	Priority: Increase the local market share as dictated by the local economy.
Coverage: metropolitan or rural areas with interdependent LUs	Coverage: just a single LU.
Focus: scope of Work, Referral, Portability, Crew Mix, Wages & Dues, Training, Disputes, Bonding, variance process.	Focus: scope of work, committee, CE/CWs, Crew Mix, LMCC role, variance process.





Task (6) Document and disseminate the study findings





Associate Professor, Santa Clara University

HOME RESEARCH

CH PUBLICATIONS

TEACHING

PROFESSIONAL EXPERIENCE

AWARDS SE

RVICE

ABOUT ME

ELECTRI

INTERNATIONAL

his research was supported

by the generous funding of ELECTRI International, the

research foundation of the electrical construction industry

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ELECTRI Council Feedback Poll

Please use this LINK to provide your feedback and suggestions.

Study Data Visualizations

- 1. IBEW Local Market Share Values 2004 2017.
- 2. IBEW Locals Market Share Trends and Census Data.
- 3. IBEW Locals Clustering and Market Share Trends.

Study Reports & Publications

1. Presentation to the ELECTRI Council, Denver Colorado, 7/16/2019

Proposed Market Share Growth Strategies

- 1. Establish regional portability agreements
- 2. Provide incentives and support system for union small contractors
- 3. Advocate for uniform electrician licensing across intra-state metropolitan areas
- 4. Expand the use of CE/CWs
- 5. Balance between local and regional market recovery agreement
- 6. Merge local LMCC into regional LMCC
- 7. Merge unions in large metropolitan areas
- 8. Establish and support lobbying entities
- 9. Counter globalization with Global Framework Agreements
- 10. Implement proactive workforce recruitment and organizing initiatives
- 11. Increase organizing effort in the immigrant population

Study Main Data Collection Findings:

- Public projects can help maintain a stable positive market share. IBEW local
 unions with positive market share trends had 34% of their man-hours from publiclyfunded project, versus 24% for the local unions with negative market share trends.
- Availability of industrial construction work is critical for positive market share trend. Growing and resilient local unions had around 50% of their hours from industrial projects, compared to around 30% in shrinking local unions.
- Growing local unions showed slightly larger Tech Installer programs, if the low-voltage work can be sustained in local market. Growing local unions had

Please provide your feedback.

Check the data visualization.

Access the slides of today's presentation.

Read the snippet of the study data findings and proposed strategies.

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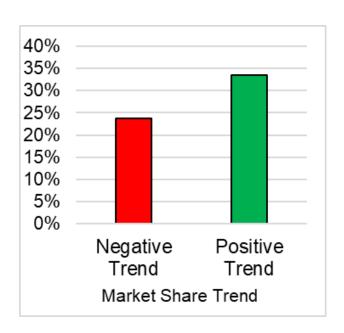
Associate Professor Santa Clara University

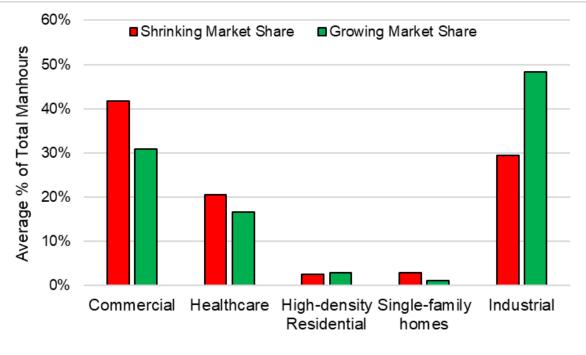
hsaid@scu.edu





Industry Segments





Proportion of man-hours in publically-funded projects (Interview Data)

Public projects can help maintain a stable positive market share. IBEW local unions with positive market share trends had 34% of their manhours from publicly-funded project, versus 24% for the local unions with negative market share trends.

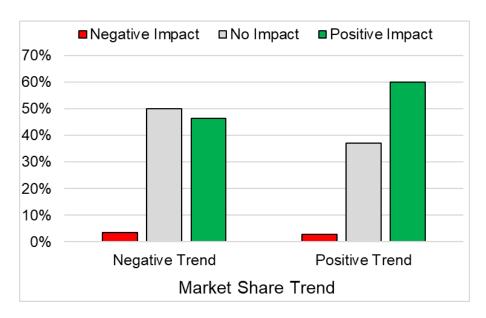
Distribution of man-hours over the <u>industry segments</u> (Interview Data)

Availability of industrial construction work is critical for positive market share trend. Growing and resilient local unions had around 50% of their hours from industrial projects, compared to around 30% in shrinking local unions.

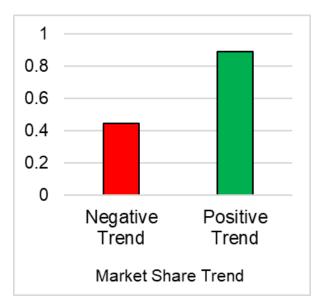


Mega Projects

Projects that cause large spikes in man-hours, like large data centers, energy plants, corporate campuses.



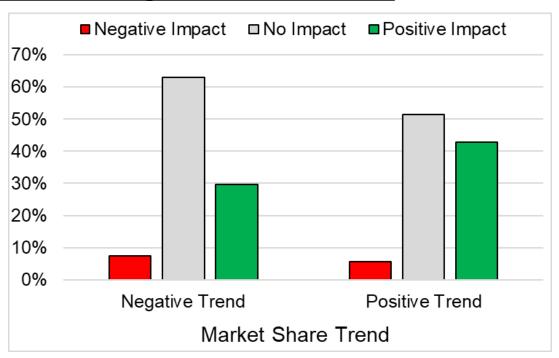
Impact of "mega" projects on LUs with positive and negative market share trends
(Online Survey Data)



Average number of <u>"mega"</u> projects in the LU 2004 – 2017 (Interview Data)



Low Voltage & Automation



10%
8%
6%
4%
2%
Negative Positive Trend
Trend
Market Share Trend

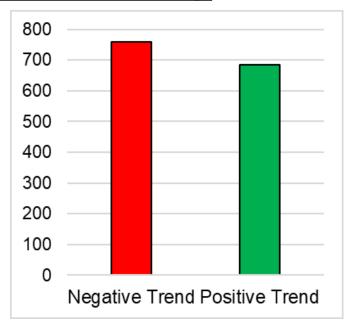
Impact of <u>low-voltage work</u> on LUs with positive and negative market share trends
(Online Survey Data)

% of <u>Tech Installers</u> to IBEW Total Working Members (Interview Data)

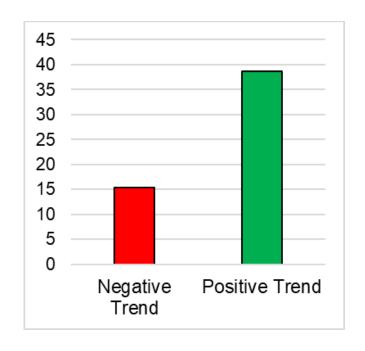
Growing local unions showed slightly larger Tech Installer programs, if the low-voltage work can be sustained in local market. Growing local unions had around 10% of their working members in the Tech Installer program, compared to 7% for the shrinking local unions.



IBEW membership



Average number of IBEW working members per 1 million capita (Interview Data)

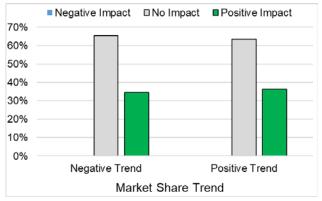


Average number of IBEW working members per 1 signatory contractor (Interview Data)

With the same worker organizing effort, growing local unions organized less but larger signatory electrical contractors. The worker organizing levels were similar in the growing and shrinking local unions, resulting in around 700 union members for every 1 million population. However, growing local unions had less but larger signatory contractors with around 40 IBEW members per a contractor, compared to only 15 IBEW members per a contractor in shrinking local unions.



Project Labor Agreements (PLAs)



6
5
4
3
2
1
0
Negative Positive Trend
Trend
Market Share Trend

Impact of <u>Public PLAs</u> on LUs with positive and negative market share trends (Online Survey Data)

Impact of <u>Private PLAs</u> on LUs with positive and negative market share trends (Online Survey Data)

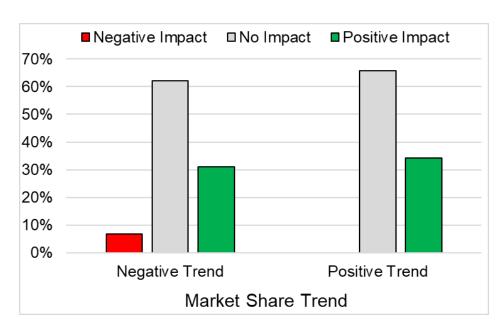
Average number of PLAs in the LU 2004 – 2017 (Interview Data)

More than half of surveyed local unions reported no PLAs or no impact of PLAs on their market share. PLAs were not applicable for around 60% of the surveyed local unions, for both publically-funded and privately-funded projects.

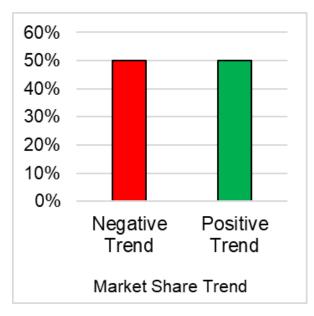
Shrinking local unions showed high dependency on PLAs. PLAs were almost inexistent in the interviewed growing local unions, while shrinking unions reported around 5 PLAs in their jurisdictions.



National Maintenance Agreements



Impact of <u>National Maintenance Agreements</u> on LUs with positive and negative market share trends (Online Survey Data)

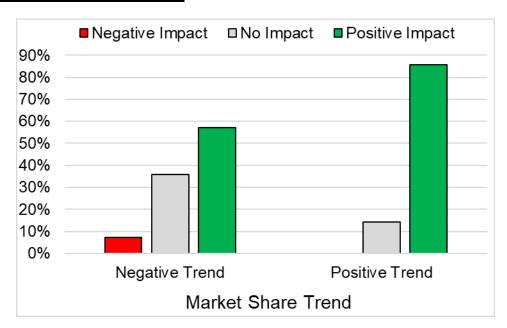


% of LUs with <u>maintenance</u> <u>agreements</u> 2004 - 2017 (Interview Data)

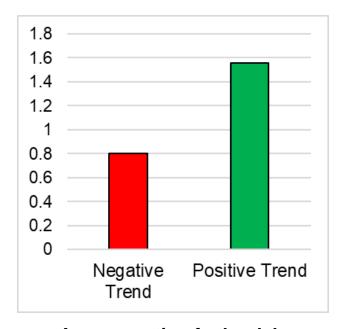
National presidential maintenance agreements had no impact on growing or shrinking local unions. 60% of the survey local unions had no involvement in national maintenance agreements. Even if they exist, these agreements don't result in significant union man-hours.



Crew Ratios



Impact of <u>relaxed crew ratios</u> on LUs with positive and negative market share trends (Online Survey Data)

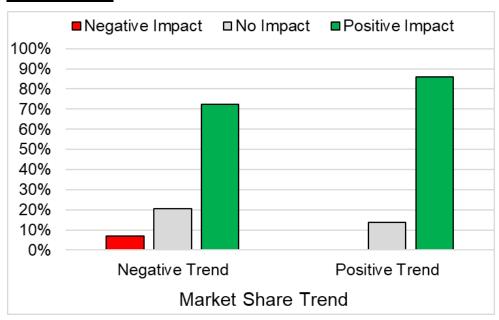


Average ratio of other labor classifications to 1 Journeyman 2004 - 2017 (Interview Data)

Growing local unions benefited from relaxed crew ratios. 85% of the survey growing local unions said relaxed crew rations supported their market shares, compared to 69% of shrinking local unions. The collective bargaining agreements in growing local unions allow for around 1.5 lower-classification worker for each 1 journeyman. This ratio drops to around 0.8 in shrinking local unions.



CW/CE



Negative Trend Positive Trend

Negative Trend

Negative Trend

CW/CE Residential

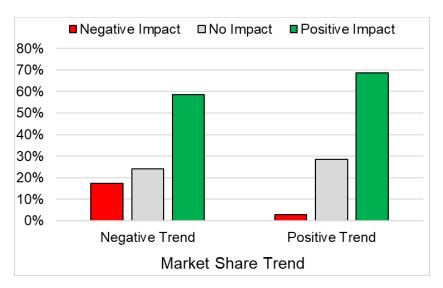
Impact of <u>CE/CWs</u> on LUs with positive and negative market share trends
(Online Survey Data)

% of <u>CW/CE</u> and <u>Residential Wiremen</u> to IBEW Total Working Members (Interview Data)

CE/CW worker classification was instrumental for local unions to grow their market share. The CE/CWs represented 25% of the working IBEW members in growing local unions, compared to 3% in shrinking locals.



Portability



Negative Trend

Negative Trend

National Local Regional Portability

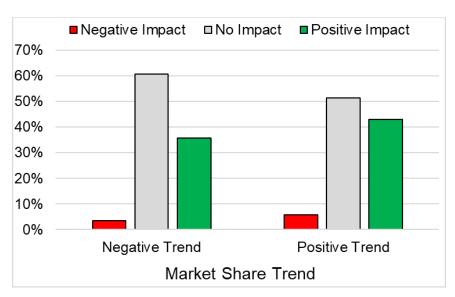
Impact of <u>Portability</u> on LUs with positive and negative market share trends (Online Survey Data)

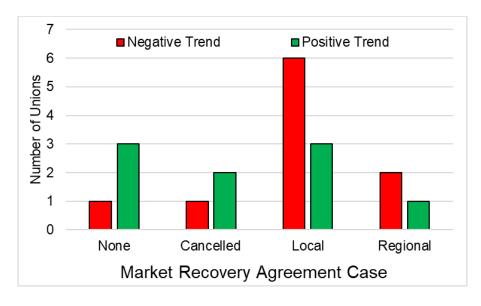
Number and classification of <u>portability</u> <u>agreements</u> applied by studied LUs 2004 - 2017 (Interview Data)

Portability was perceived to have a positive impact on market share. 80% of the growing local unions have had varying degrees of open portability, compared to 55% of shrinking local unions. Almost all of the open portability cases were part of regional market recovery agreements.



Market Recovery Agreements





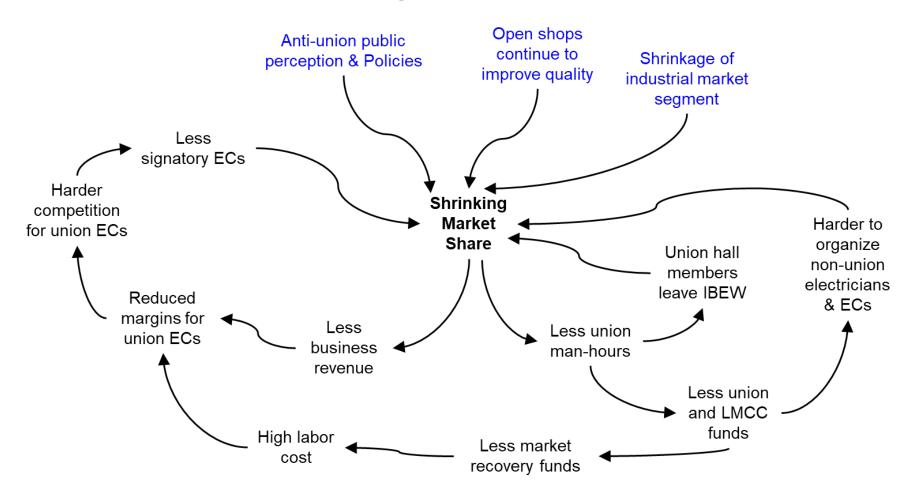
Impact of <u>Market Recovery agreements</u> on LUs with positive and negative market share trends
(Online Survey Data)

Number and classification of market <u>recovery</u> <u>agreements</u> applied by studied LUs 2004 - 2017 (Interview Data)

Market recovery agreements (MRAs) are more common in shrinking local unions, but their limited scopes do not help in recovering the market. 80% of the interviewed shrinking local unions had either a local or regional MRAs, compared to 45% of growing locals. Most of MRAs cover only small non-industrial projects, like gas stations, strip malls, retail, and residential.



There is a need to BREAK the multiple negative loops resulting in shrinking market share



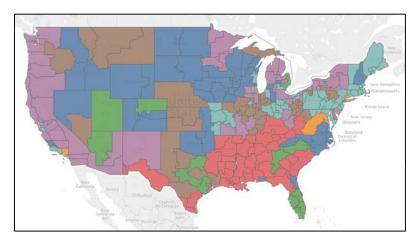


Merge Local LMCC into Regional LMCC

- Benefits:
 - Sharing of the fixed costs
 - Pool of resources
 - Better coordination
 - Platform for regional initiatives (portability, CE/CWs, ...)
- Suggested guidelines for merging LMCC:
 - Locals with similar socio-economical-political conditions (consider the 7 clusters of this study)
 - Preferably 1 2 chapters
 - Similar pay rates and benefits with 5 10 % disparities
 - Diverse market demands and contractor expertise (industrial, commercial, VDV, healthcare, etc.)



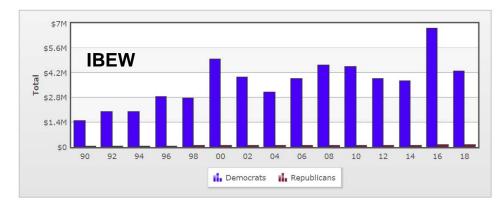
- Ohio Electrical LMCC (8 NECA Chapters + 22 LUs)
- The Inland Empire LMCC (1 NECA Chapter + 2 IBEW LUs)

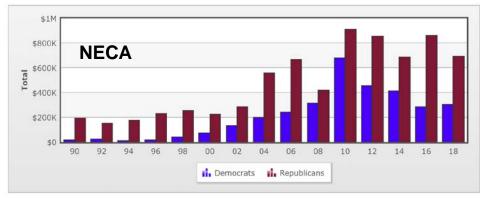




Establish and support lobbying entities

- State and local legislation lobbying coordination between NECA & IBEW.
- Example: LU 340 and Sacramento Chapter:
 - Political lobbying under a 501(c)(4)
 for tax and flexibility benefits.
 - Building coalitions with other industry entities:
 - Energy companies
 - Real estate
 - Others





Total lobbying contributions to Democrats and Republicans (Center for Responsive Politics)



Countering Globalization: Global Framework Agreements

- Example segments with increasing globalization: Paper Mills Manufacturing Transit Logistics Data & Communication International Framework Agreement (IFA): labor agreements negotiated between transnational corporations (TNC) and the global union federations (GUFs). Challenge: Most of building construction trades are not affiliated with a GUF. Potential GUF: International Trade Union Confederation (ITUC) Strategy:
 - IBEW and other building trades organize and join a GUF (ITUC).
 - Develop IFA with large construction and other relevant TNC.

Z IAS

Increase organizing effort in the immigrant population

- Meet <u>Neidi Dominguez</u>, the National Strategic Campaign Coordinator and Assistant to the General President for the International Union of Painters and Allied Trades (IUPAT).
- Neidi was a DACA immigrant, benefited from the union support, and now supporting her union.

- Opposite side: United Brotherhood of Carpenters (UBC).
- Benefits to the union from organizing immigrants (documented and undocumented):
 - 1) Overcoming workforce shortage (demographic shifts, millennials lack of interest in the trades)
 - 2) Improving the public image of the unions.
 - 3) Depriving open-shop contractors from their main workforce source.
- ☐ Immigrants organizing suggested strategies:
 - o CBA and PLA new requirements for immigrant protection (in compliance with NLRA).
 - Focus organizing effort on south metropolitan areas OR "sanctuary" states and cities.
 - Sponsorship of citizenship application of organized immigrants (with shown commitment)
 - Focused outreach in High schools with high immigrant populations.