

# Parolee Success in Iowa: *Individual and Treatment Effects on Recidivism*



*Presented to the Iowa Department of Corrections  
Directors Meeting  
on January 17, 2013 in Des Moines, Iowa.*

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**NIJ**  
NATIONAL  
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# ***OVERVIEW***

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## **What is the project about?**

To understand the individual and community factors that drive recidivism rates among parolees in Iowa.

- Demographics and risk propensities.
- Treatment provisions and quality.
- Distance to DOC and social services.
- Community socioeconomic contexts

## **Who funded it?**

*National Institute of Justice grant encouraging ...*

- Collaboration between criminal justice agency professionals and university researchers.
- Application of social science research to address practical issues in the criminal justice system.

# OVERVIEW

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## Why does it matter?

Need to serve more parolees with less state funding.

Need to focus on areas where you have control and can make a difference.

Avoid spending resources on areas where you have little control.



# ***PLAN OF WORK***

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## **Step 1 ... Controlling for treatment selection.**

- Compile data from DOC, Census, and other sources.
- Estimate propensity scores for statistical model.

## **Step 2 ... Understanding fixed effects of recidivism.**

- Predict probability of recidivism at 1-yr and 2-yr intervals.
- Model includes individual risk factors, treatment provision/quality, distance from services, and community socioeconomic conditions.
- Regional models – urban-rural areas and CCDs.
- Demographic models – men-women and race.
- Purpose is to understand what factors drive recidivism that are largely beyond the control of CCD staff.



# ***PLAN OF WORK***

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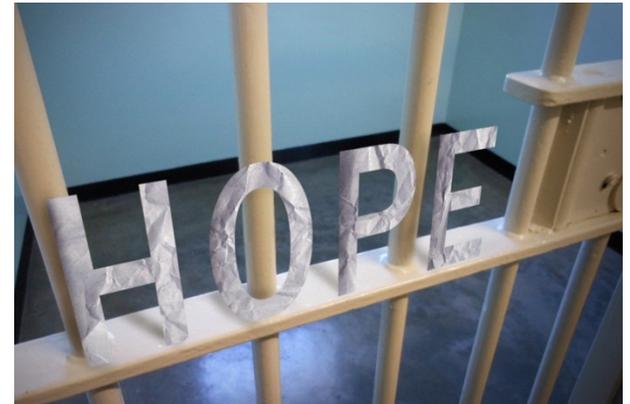
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## **Step 3 ... Understanding amenable effects of recidivism.**

- Identify parolees that did better than the model predicted.
- Interviews will be conducted within each CCD to ascertain why these parolees did not reoffend, when their risk profile suggested they should have.
- Purpose is to understand the unique factors that cannot be accounted for by the model, and which CCD staff may have some control over.

## **Step 4 ... Synthesis and dissemination.**

- Based on the results, a series of “best practices” will be identified and communicated to corrections professionals.



# *PAROLEE SUCCESS IN IOWA*

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## DEMOGRAPHICS

# DEMOGRAPHICS

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## Defining parolees ...

*N=1,272 persons who ...*

- were paroled or special sentenced in 2010
- had valid physical address
- lived in Iowa and not institutionalized



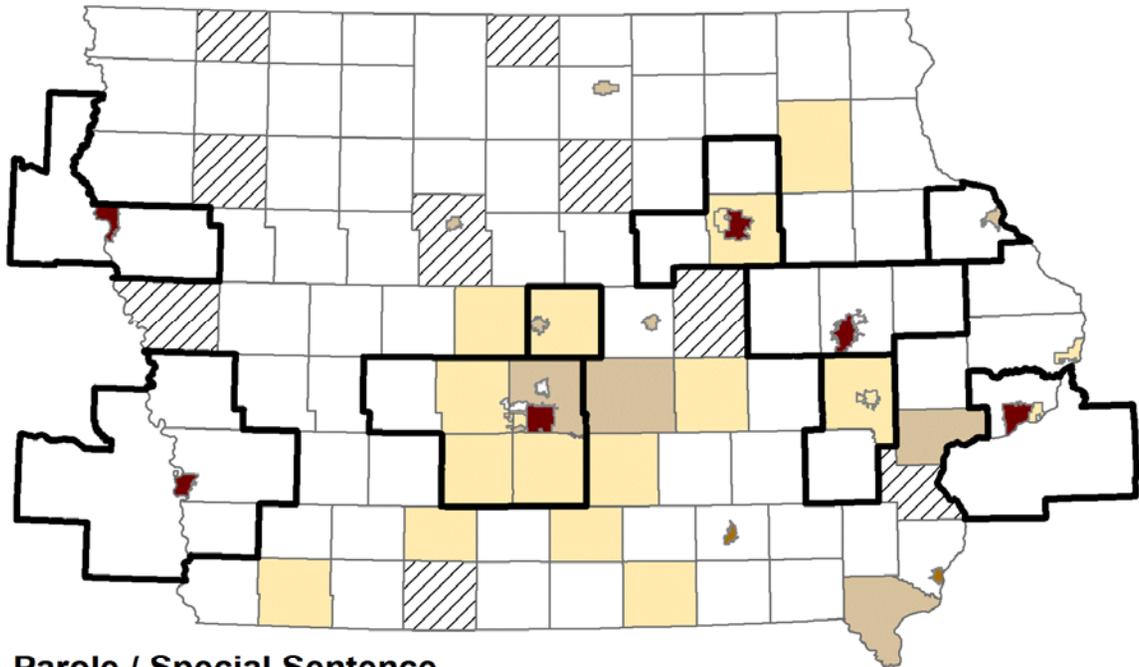
## Basic Demographics ...

*Most parolees are white middle-aged men who were born in Iowa.*

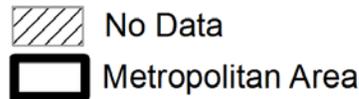
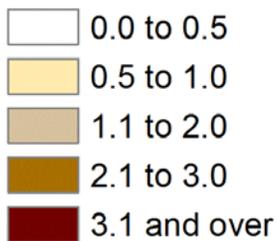
- Male – 85%
- Average age – 38 years.
- White, non-Hispanic race – 74% (97% in 4<sup>th</sup>-District)
- Iowa born – 74% (62% in 4<sup>th</sup>-District)
- Hispanic any race – 3% (6% in 3<sup>rd</sup>, 6<sup>th</sup>, 7<sup>th</sup> Districts)
  - Only 1% needed interpreters.

# DEMOGRAPHICS

## Parole / Special Sentence Population ...

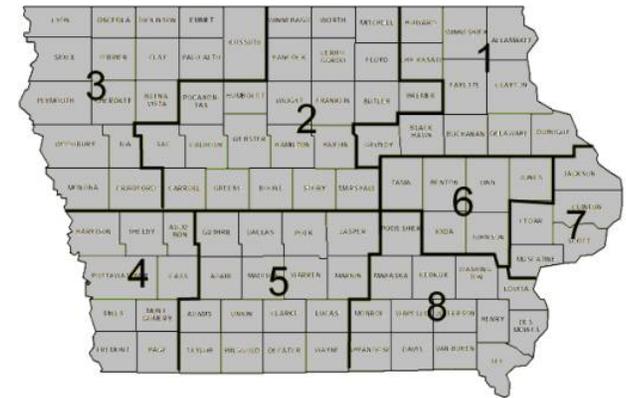


Parole / Special Sentence Population (percent offenders)



ANALYSIS: Sociology, Iowa State University.  
SOURCE: Iowa Department of Corrections.

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- 1-District = 17.0
- 2-District = 10.9
- 3-District = 7.7
- 4-District = 5.3
- 5-District = 30.7
- 6-District = 6.5
- 7-District = 11.4
- 8-District = 10.5

# *PAROLEE SUCCESS IN IOWA*

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## **RISK ASSESSMENT**

# RISK ASSESSMENT

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Most parolees are high risk who have multiple previous convictions.

High LSI Risk – 38.91 (last score)

Growing LSI Risk – 1.96 rise (last v. first score)

Previous convictions – 7.7

- *Highest in 7<sup>th</sup>-District (10.1). Lowest 5.6 4<sup>th</sup>-District (5.6)*

Sentence served – 24.5 months

- *Highest in 6<sup>th</sup>-Dist (30.6 mos). Lowest in 4<sup>th</sup>-Dist (18.3 mos)*

Paroled from violent offense – 17.8%

- *Highest in 6<sup>th</sup>-Dist. (21.6%). Lowest in 4<sup>th</sup>, 7<sup>th</sup> Dist. (13.1%)*

Paroled sex offender – 5.0%

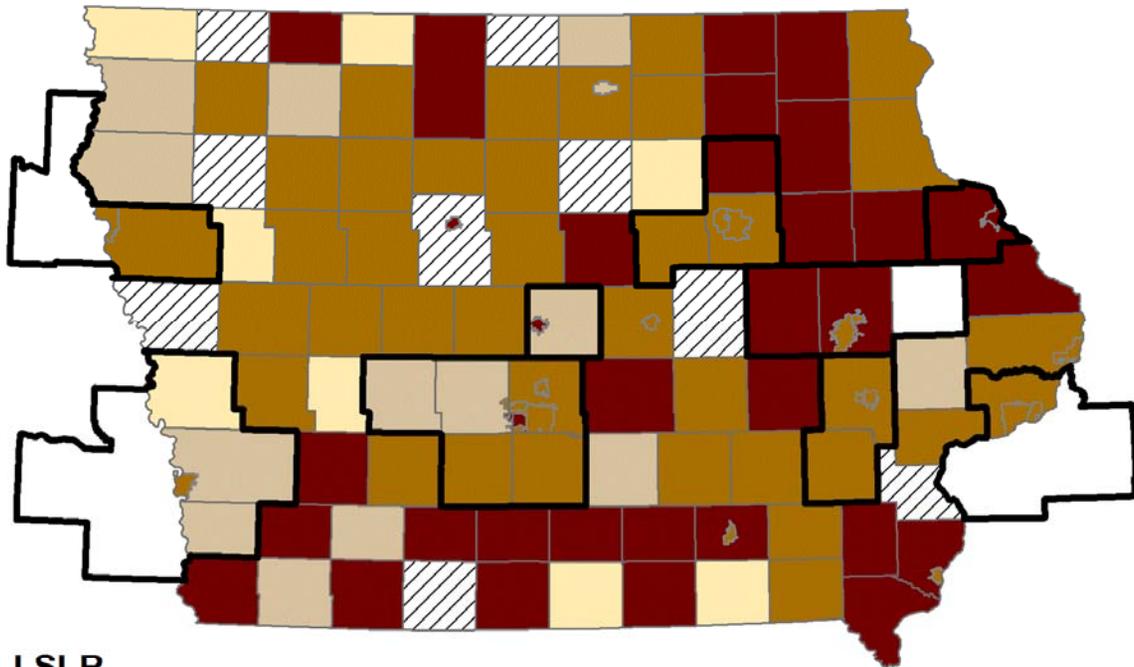
- *Highest in 2<sup>nd</sup>, 4<sup>th</sup>, 6<sup>th</sup> Dist (7.3%). Lowest in 5<sup>th</sup>-Dist (3.6%)*

Drug and other non-property offenses – 49.9%.

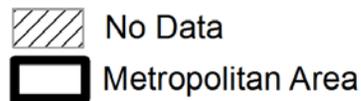
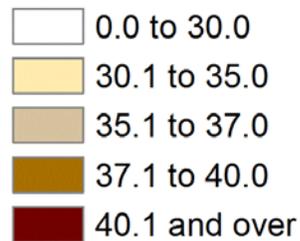


# RISK ASSESSMENT

LSI-R Scores (last) ...

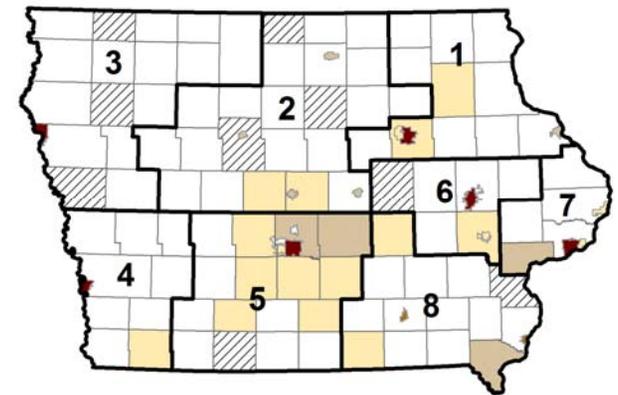


LSI-R  
(Last Score)



ANALYSIS: Sociology, Iowa State University.  
SOURCE: Iowa Department of Corrections.

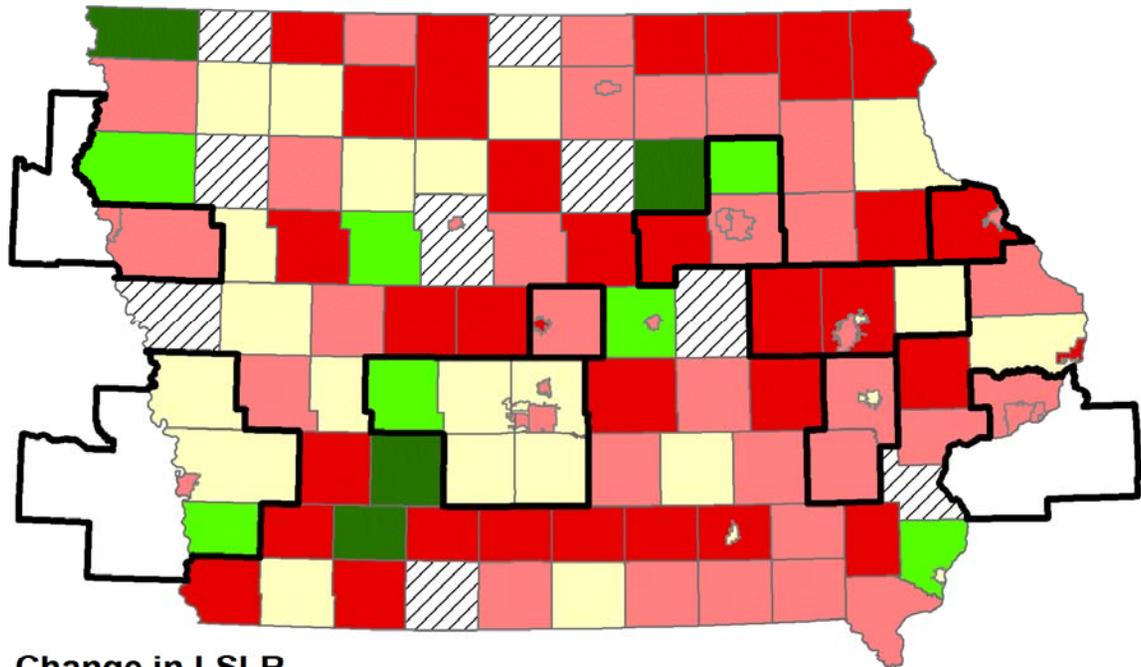
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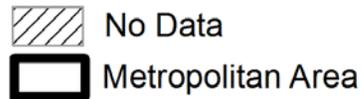
- 1-District = 39.43
- 2-District = 38.97
- 3-District = 37.67
- 4-District = 38.38
- 5-District = 38.73
- 6-District = 38.90
- 7-District = 39.31
- 8-District = 39.26

# RISK ASSESSMENT

*Change in LSI-R Scores (last v. first) ...*

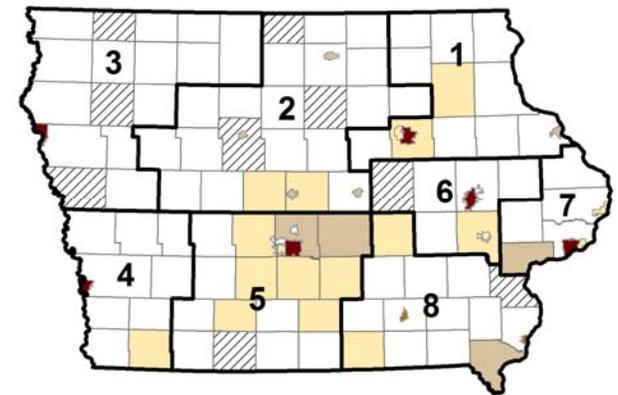


**Change in LSI-R  
(Last v. First Score)**



ANALYSIS: Sociology, Iowa State University.  
SOURCE: Iowa Department of Corrections.

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- **1-District = 2.45**
- 2-District = 2.11
- **3-District = 1.42**
- 4-District = 1.97
- 5-District = 1.75
- 6-District = 2.03
- **7-District = 2.65**
- **8-District = 1.19**

# *PAROLEE SUCCESS IN IOWA*

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## TREATMENT COMPLETION

# ***TREATMENT***

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*Most parolees are currently in treatment, but very few have actually completed any treatment.*

## **Treatment In-Progress or Completed (Needs 1-2) ...**

- 40.1% in no treatment
- 28.8% in 1 treatment
- 22.9% in 2 treatments
- 8.3% in 3 or more treatments

## **Treatment Completion (Needs 1-2) ...**

- 65.5% no completions
- 21.5% 1 completion
- 11.3% 2 completions
- 1.7% 3 or more completions

# ***TREATMENT***

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*What drives treatment completion?*

Treatment **more likely** to be completed if ...

- Male parolee
- 3 or more offenses
- Added second offense
- Added charges while under supervision
- Past school expulsion or suspension
- Did not complete 12<sup>th</sup> grade
- Unfavorable attitude towards conviction
- Absence & increasing anti-criminal acquaintances
- Increasing unsatisfactory relationship with relatives

**Low Treatment Completion Bias = 26.4%**  
**No race/ethnic bias in treatment completion.**

# ***TREATMENT***

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*What drives treatment non-completion?*

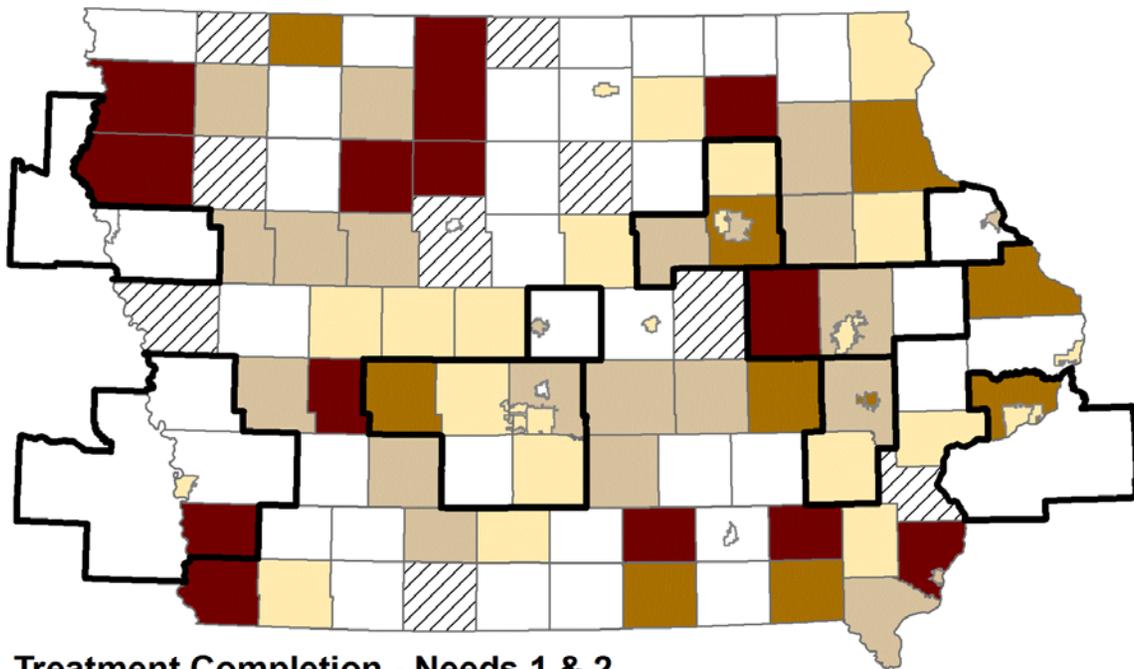
Treatment **less likely** to be completed if ...

- Convicted from Dubuque courts
- Paroled from prison
- Three or more address changes last year
- Added adult conviction
- Severe interference from active psychosis
- Psych assessment needed (on-going)
- Increasing drug problem

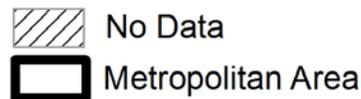
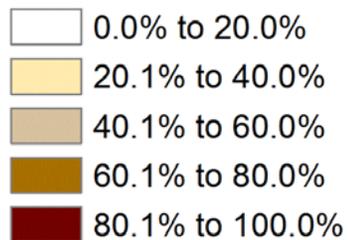
**Low Treatment Completion Bias = 26.4%**  
**No race/ethnic bias in treatment completion.**

# TREATMENT

## Treatment Completion (Needs 1 & 2) ...

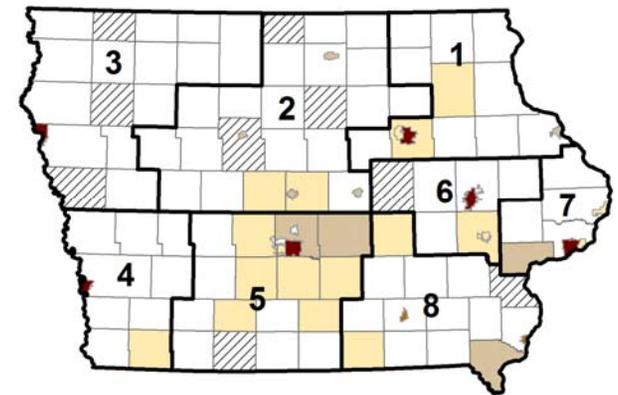


Treatment Completion - Needs 1 & 2  
(percent)



ANALYSIS: Sociology, Iowa State University.  
SOURCE: Iowa Department of Corrections.

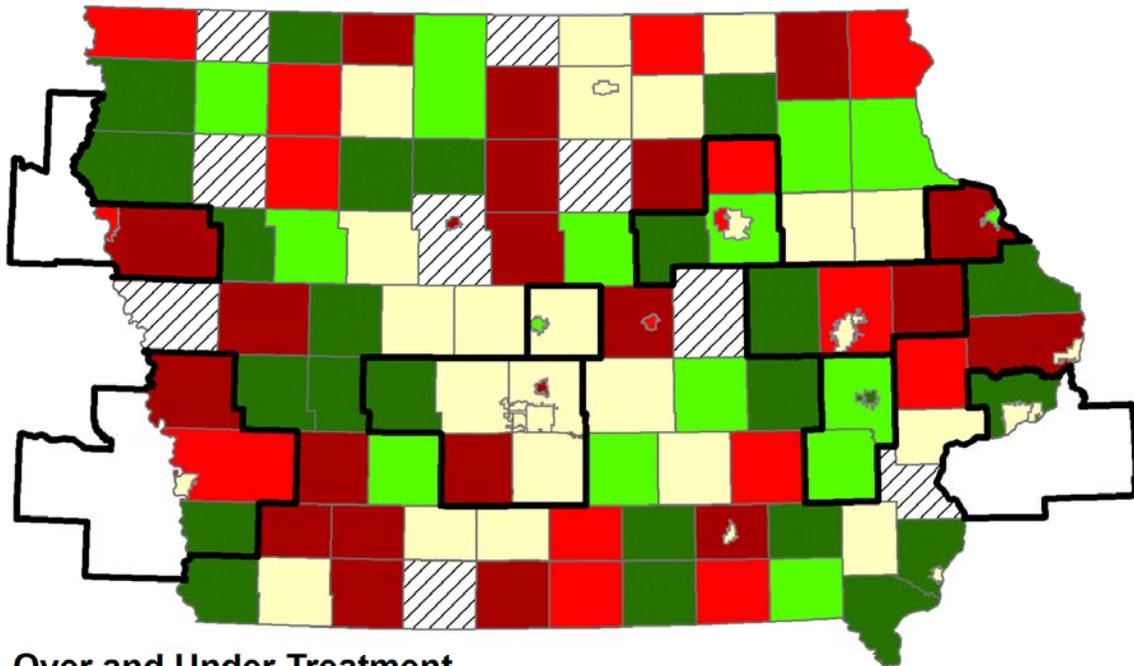
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- 1-District = 43.72
- 2-District = 28.78
- 3-District = 23.71
- 4-District = 32.35
- 5-District = 31.03
- 6-District = 34.94
- 7-District = 36.55
- 8-District = 42.11

# TREATMENT

## Under-Treatment and Over-Treatment ...



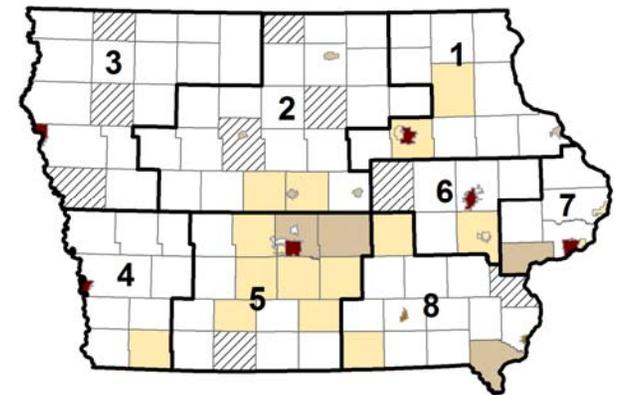
### Over and Under Treatment Completion Rate (Needs 1 & 2)

- Very Under-Treated (-20% or less)
- Under-Treated (-20% to -10%)
- Optimal Treated (-10% to 10%)
- Over-Treated (10% to 20%)
- Very Over-Treated (20% or more)

- No Data
- Metropolitan Area

ANALYSIS: Sociology, Iowa State University.  
SOURCE: Iowa Department of Corrections.

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- 1-District = 1.65
- 2-District = -2.71
- 3-District = -8.86
- 4-District = 0.92
- 5-District = -2.84
- 6-District = 0.39
- 7-District = 3.57
- 8-District = 10.37

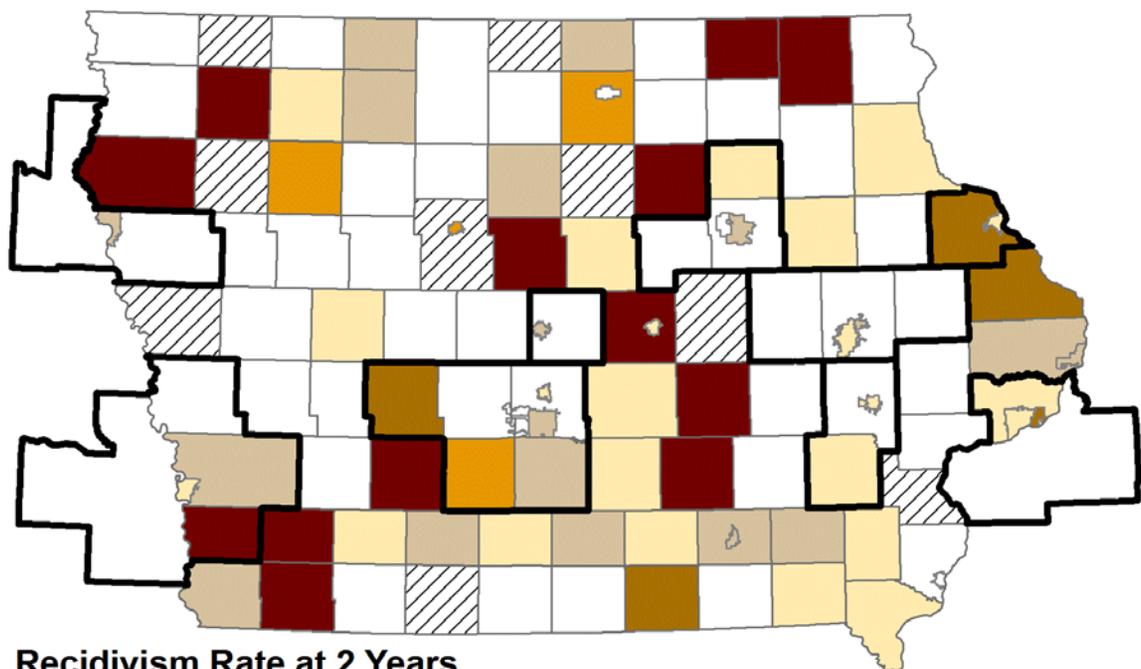
# *PAROLEE SUCCESS IN IOWA*

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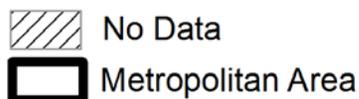
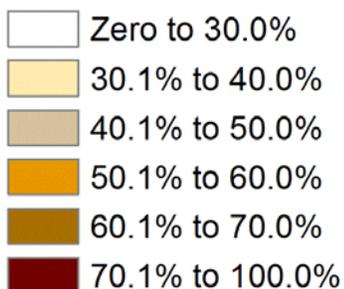
## EXPLAINING RECIDIVISM

# RECIDIVISM

*Recidivism at 2-Years (to prison or arrest) ...*

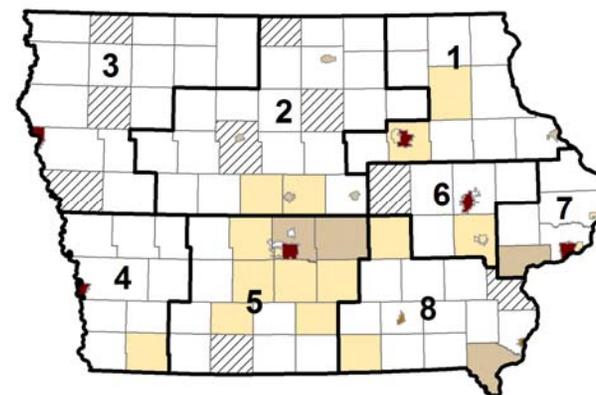


**Recidivism Rate at 2 Years**



ANALYSIS: Sociology, Iowa State University.  
SOURCE: Iowa Department of Corrections.

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- 1-District = 38.89
- 2-District = 36.69
- **3-District = 43.88**
- **4-District = 41.18**
- 5-District = 40.26
- **6-District = 32.53**
- **7-District = 32.41**
- 8-District = 39.85

## ***FINDINGS – RURAL PAROLEES***

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### **Factors increasing odds of recidivism ...**

- Not married (51%)
- Less serve conviction crime (15%)
- Greater & growing criminal history risk (31% & 16%)
- Greater housing/residence risk (41%)
- Greater alcohol/drug risk (15%)
- Greater & growing emotion/psychological risk (14% & 13%)
- Farther from community college & workforce offices (1% each).

*Model explains 27.3% of 2-year recidivism.  
52.4% correct classification as recidivist.*

## ***FINDINGS – RURAL PAROLEES***

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### **Factor decreasing odds of recidivism ...**

- Older age (-2%)
- More dependents (-19%)
- Greater education/employment risk (-12%) – *programs available*
- Greater non-participation/time-use risk (-26%) – *more supervision*
- Greater pro-crime attitudes (-20%) – *more supervision*
- Growing financial risk (-29%) – *public assistance*
- Growing family/martial risk (-17%) – *programs available*
- Greater distance to DOC office (-1%)

*Model explains 27.3% of 2-year recidivism.  
52.4% correct classification as recidivist.*

## ***FINDINGS – URBAN PAROLEES***

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### **Factors increasing odds of recidivism ...**

- Male (189%)
- More dependents (9%)
- Greater criminal history risk (28%)
- Greater emotional/psychological risk (19%)
- Growing housing/residence risk (20%)

*Model explains 21.3% of 2-year recidivism.  
52.1% correct classification as recidivist.*

# ***FINDINGS – URBAN PAROLEES***

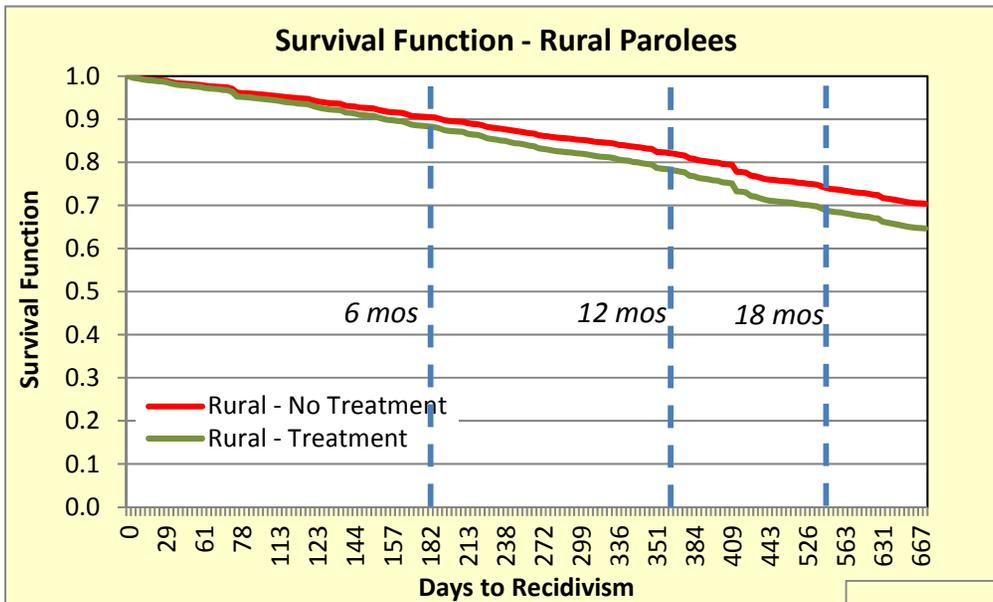
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## **Factors decreasing odds of recidivism ...**

- Older age (-4%)
- Drug conviction (-23%)
- Full-time employment (-29%)
- Greater education/employment risk (-6%) – *programs available*
- Greater financial risk (-17%) – *public assistance*
- Greater housing/residence risk (-35%) – *more supervision*
- Growing family/marital risk (-8%) – *programs available*
- Treatment completion (-47%) – *treatment works*

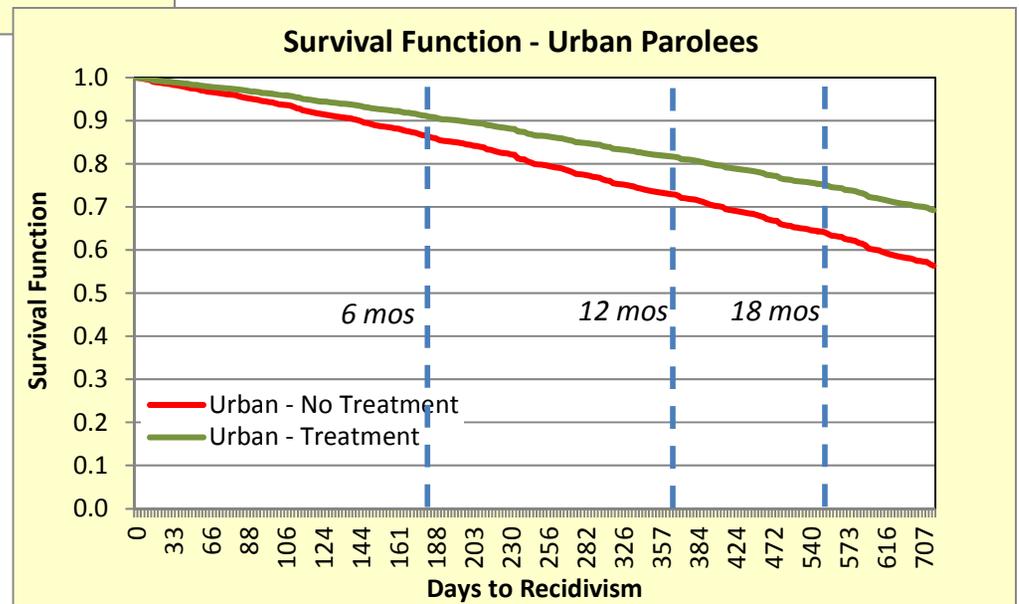
*Model explains 21.3% of 2-year recidivism.  
52.1% correct classification as recidivist.*

# FINDINGS – SURVIVAL FUNCTION



*For rural parolees ...  
Treatment has worsens survival.  
Effects are small and non-significant.*

*For urban parolees ...  
Treatment has improves survival.  
Effects are large and significant.*



## ***FINDINGS – SURVIVAL FUNCTION***

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### *Effect of treatment on survival for rural parolees ...*

- 6 mos – 2.2% *decrease* in survival
- 12 mos – 3.8% *decrease* in survival
- 18 mos – 5.2% *decrease* in survival
- 24 mos – 5.7% *decrease* in survival
- Overall – 1.3% *decrease* in survival

### *Effect of treatment on survival for urban parolees ...*

- 6 mos – 4.7% *increase* in survival
- 12 mos – 8.7% *increase* in survival
- 18 mos – 11.0% *increase* in survival
- 24 mos – 12.8% *increase* in survival
- Overall – 6.9% *increase* in survival

## ***SUMMARY***

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Treatment only works for urban parolees.

Employment matters only for urban parolees.

Distance to services important for rural parolees.

Dependents reduces rural recidivism, but increases urban rates.

Traditional risk factors increase recidivism for all.

Risks amenable to community treatment reduce recidivism for all.

Community factors only have small impact on offender recidivism.

## ***NEXT STEPS AND COMMENTS***

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### **Next Steps ...**

- Refine regression models.
- Conduct interviews this February and March.
- Analysis and write-up this summer.

# **Comments and Questions**

*For more information*

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[www.soc.iastate.edu](http://www.soc.iastate.edu)

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| I will use this information:         |   |   |   |   | Others will use this information:  |   |   |   |   |      |   |   |   |   |
|--------------------------------------|---|---|---|---|--|---|---|---|---|------|---|---|---|---|
| 5                                    | 4 | 3 | 2 | 1 | 5  | 4 | 3 | 2 | 1 |      |   |   |   |   |
| Often                                |   |   |   |   | Never  |   |   |   |   |      |   |   |   |   |
| 1                                    | 2 | 3 | 4 | 5 | <b>IOWA STATE UNIVERSITY</b><br>Extension and Outreach<br><br>Session: <u>Parolee Success in Iowa</u><br><br>Date: <u>January 17, 2013</u><br><br>Presenter: <u>Peters and Hochstetler</u><br><br>Please circle appropriate response.<br>Write comments on back. |   |   |   |   | 1    | 2 | 3 | 4 | 5 |
| Quality of presentation/information: |   |   |   |   | Importance of topic to Iowa:   |   |   |   |   |      |   |   |   |   |
| Low                                  |   |   |   |   |  |   |   |   |   | High |   |   |   |   |
| 1                                    |   |   |   |   |  |   |   |   |   | 5    |   |   |   |   |
| 2                                    |   |   |   |   |  |   |   |   |   | 4    |   |   |   |   |
| 3                                    |   |   |   |   |  |   |   |   |   | 3    |   |   |   |   |
| 4                                    |   |   |   |   |  |   |   |   |   | 2    |   |   |   |   |
| 5                                    |   |   |   |   |  |   |   |   |   | 1    |   |   |   |   |
| Knowledge of subject before session: |   |   |   |   | Knowledge of subject after session:  |   |   |   |   |      |   |   |   |   |
| None                                 |   |   |   |   | None   |   |   |   |   |      |   |   |   |   |
| A lot                                |   |   |   |   | A lot  |   |   |   |   |      |   |   |   |   |
| 1                                    | 2 | 3 | 4 | 5 | 1  | 2 | 3 | 4 | 5 |      |   |   |   |   |