

Demographic and Psychographic Profiles of ROW Trespasser Suicides

2015 ROW Trespassing Workshop
Charlotte, North Carolina

Goals of Study

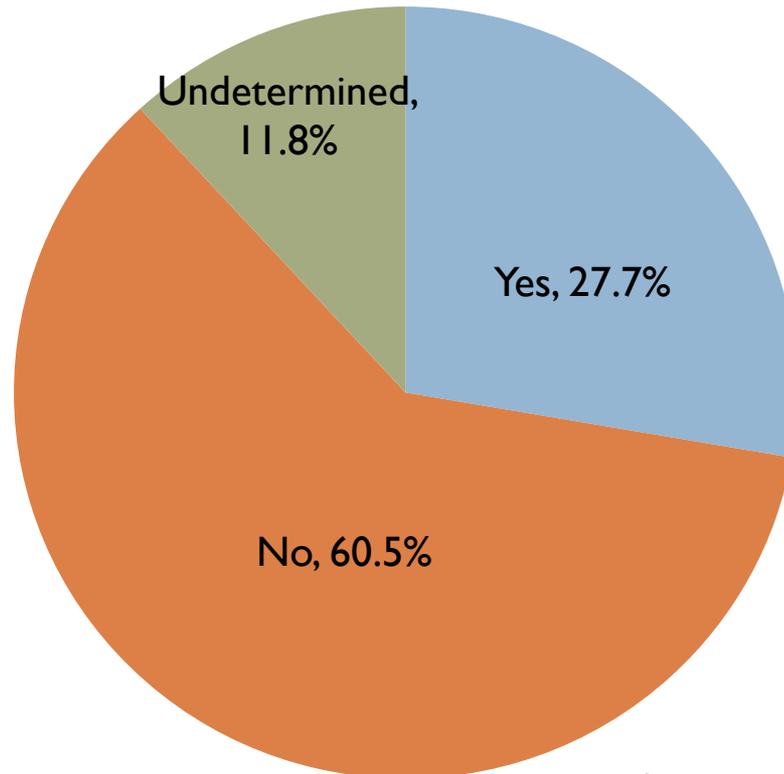
- ▶ To develop demographic and behavioral profiles of rail trespasser fatalities based on survey research and market data
- ▶ To update a 2008 Report, which used 2002-2004 fatalities data, with an even larger data set, 2005-2010
- ▶ To provide FRA with actionable data that can be used to focus outreach programs on individuals in areas where trespassing incidents are most likely

Methodology

- ▶ **Survey of Coroners/Medical Examiners (CME)**
 - ▶ Began with identification of respective jurisdictions
 - ▶ 2,662 fatalities from 564 jurisdictions surveyed
- ▶ **Survey methodology**
 - ▶ Mail-based survey
 - ▶ Follow-up via telephone, email, mail
- ▶ **54% response rate**
 - ▶ Very high for mail-based surveys (30% for internal surveys traditionally expected)

Suicide*

Although the initial purpose of the study was not directed at suicides, CMEs identified a surprisingly large percent of trespasser fatalities as suicides.



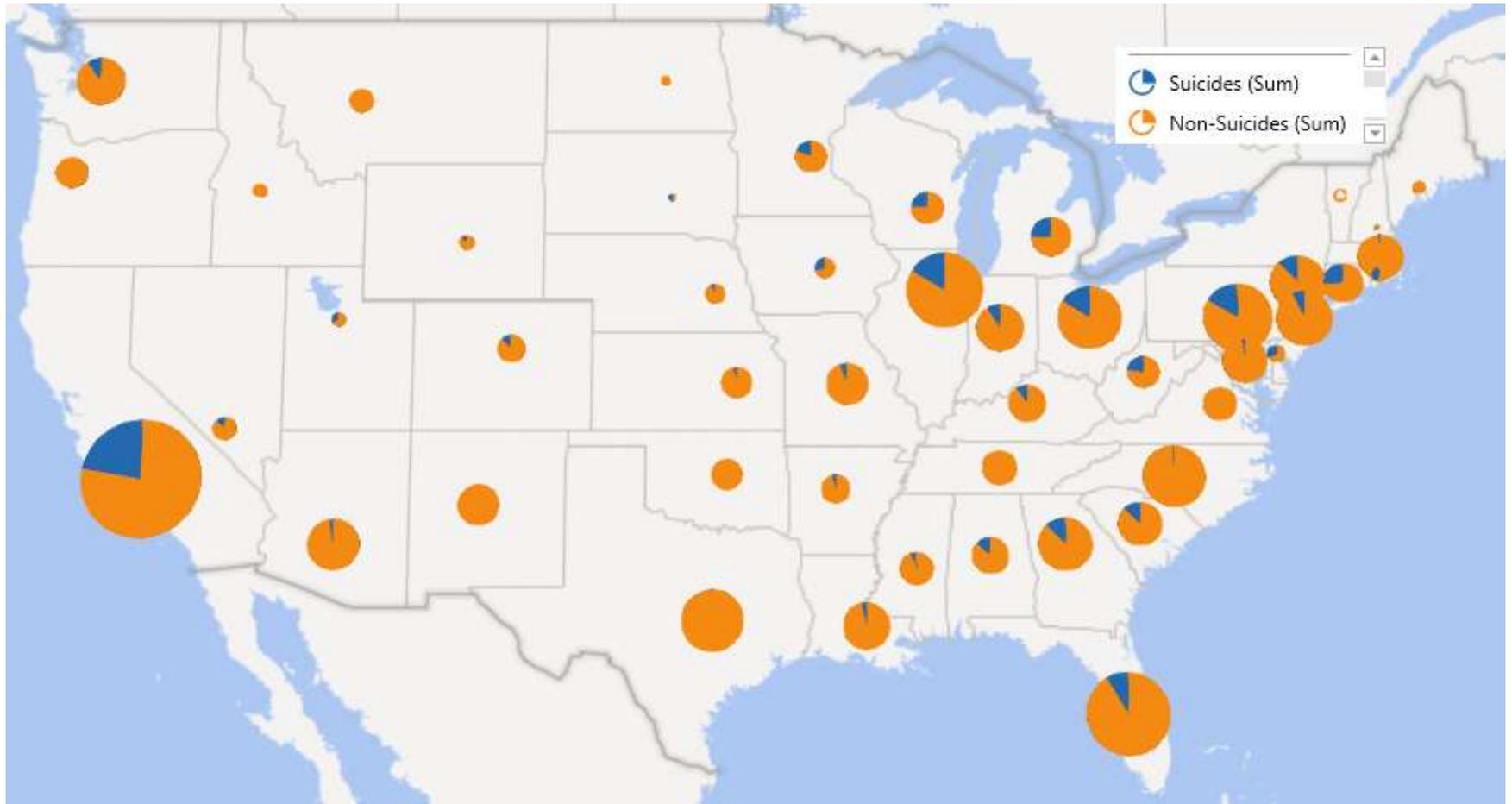
*It is important to note that for the years covered by the current study, FRA was not required to collect information on suicides. Therefore, descriptions and statistics regarding suicides in the current study represent only a portion of all railroad suicides and should be interpreted with some caution.

Type of Incident

CMEs were asked to identify the trespassers' primary behavior at the time of the incident, resulting in the table below.

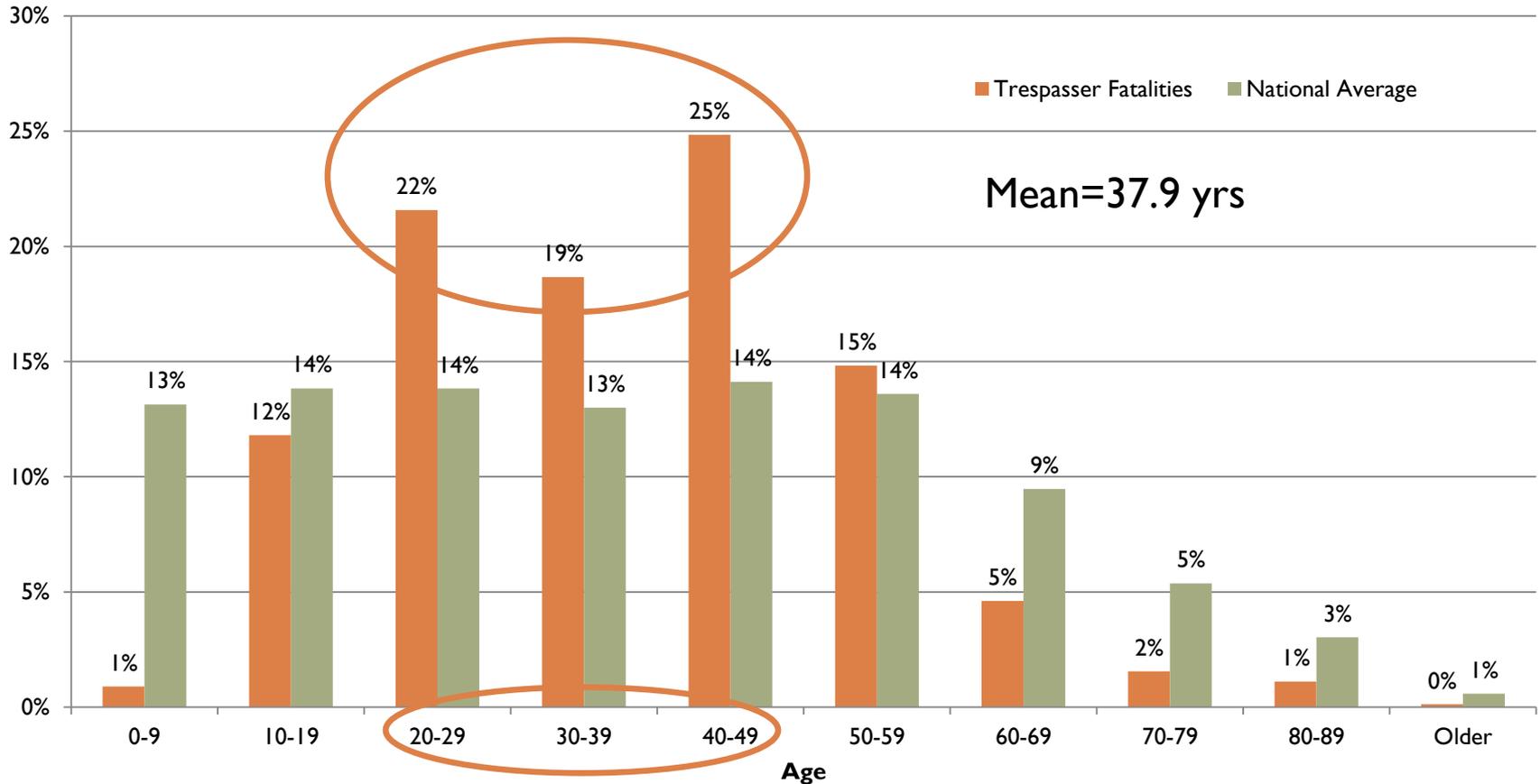
Behavior	Explanation	Count
Walking	Walking, standing on track	249
Sleeping	Sleeping, lying, reclining, lounging, sitting on track or in gauge	235
Other	Insufficient information to categorize	174
Probable	Probable suicide, but not so indicated by CME or coroner	100
Across	Walking or running across track(s)	93
Suicide	CME or coroner used the word "suicide" or "intentional" in describing incident	88
Outside	Appeared to be walking or standing outside track gauge	41
Vehicle	Involved a truck or automobile	40
Riding	Riding or getting on or off train	31
Bridge	Involved a bridge or trestle	21
ATV	ATV, dirt bike, snowmobile, etc.	16
Foul Play	Foul play suspected	3

Railroad Trespasser Fatalities and Suicides by State



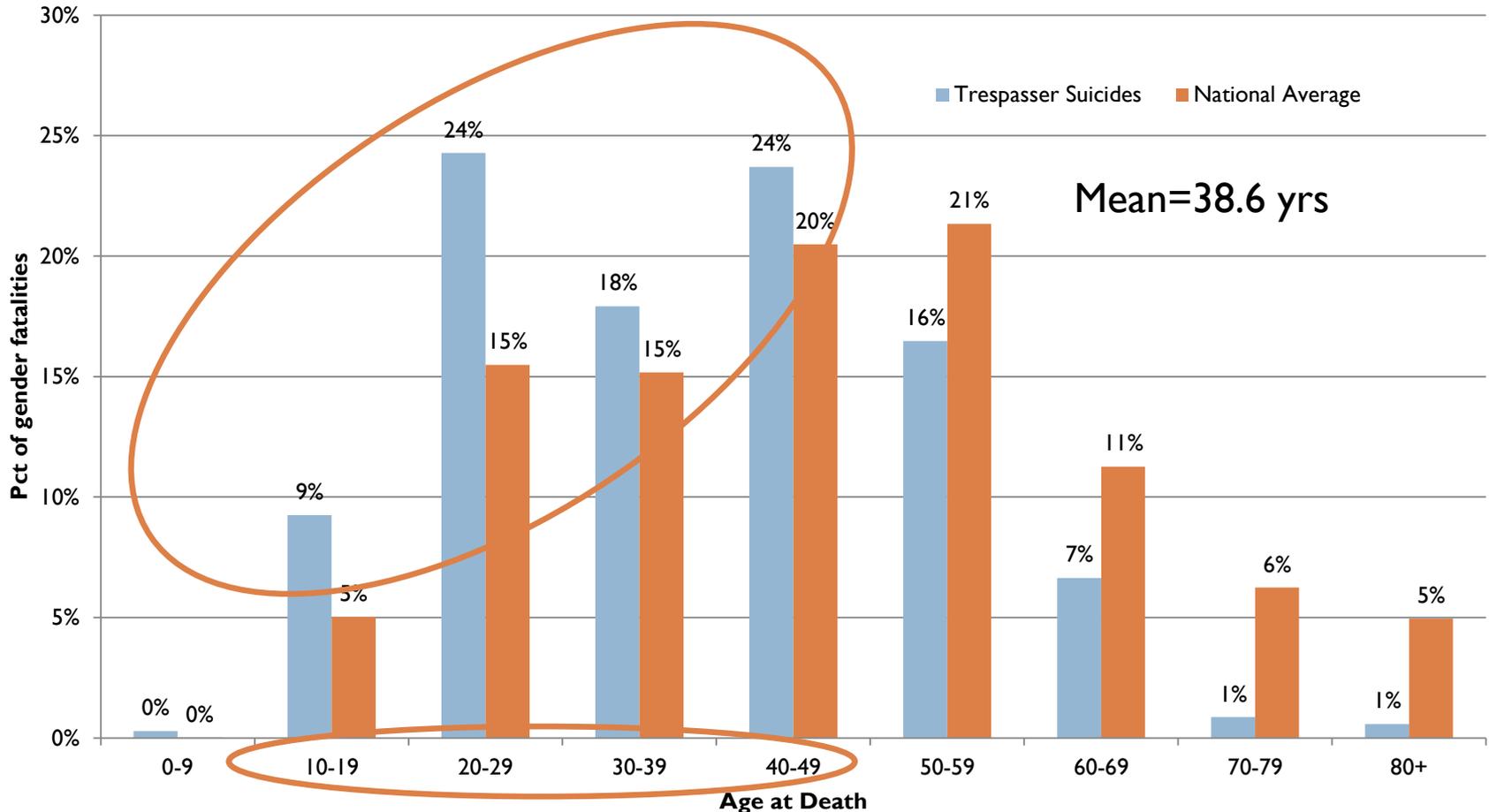
Age at Death—All Trespassers

Persons aged 20 through 49 are significantly more likely to be involved in a fatal trespassing incident.



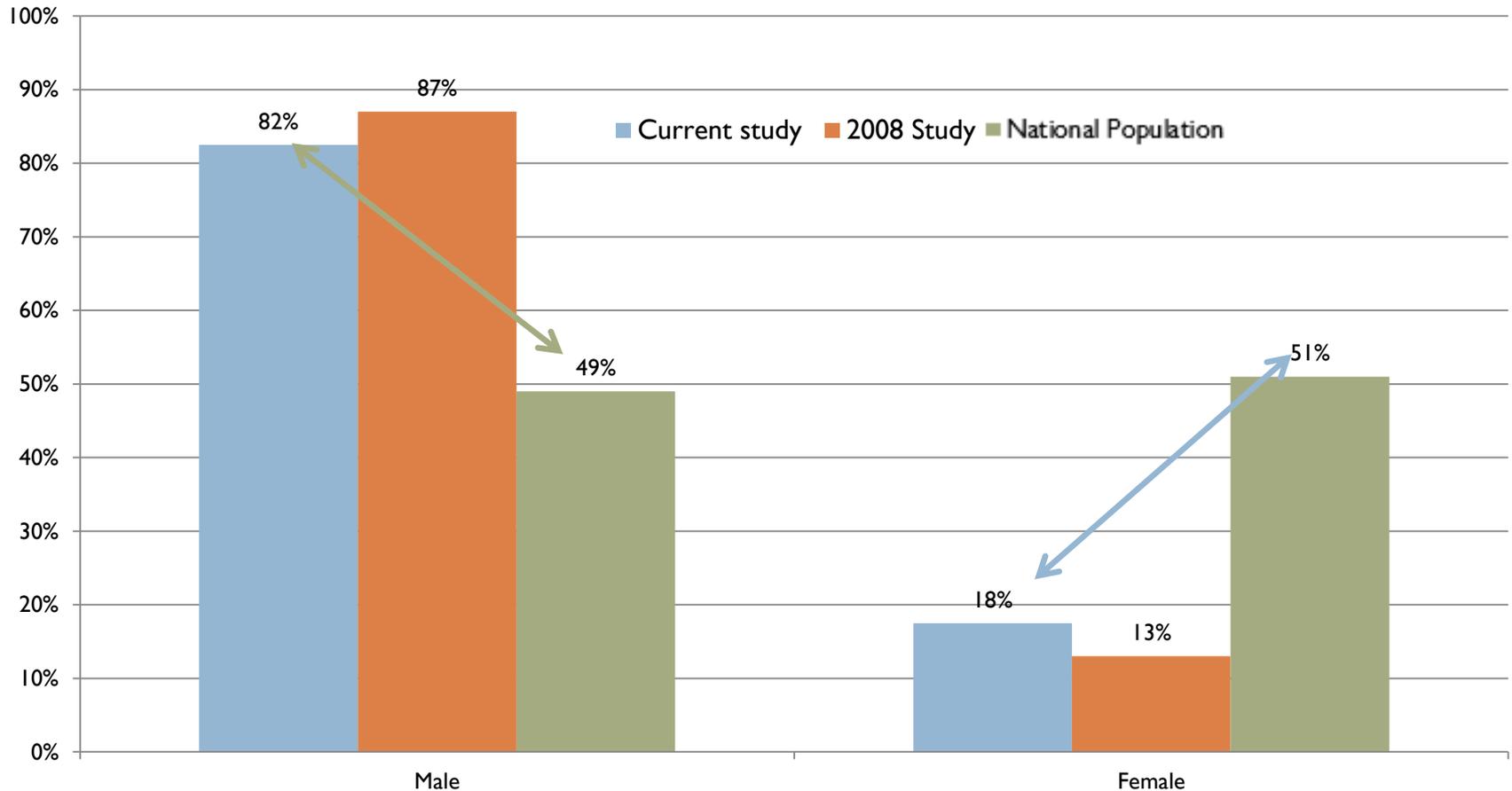
Age at Death—Suicide

Younger persons are more likely than average to choose railroads as a means of suicide.



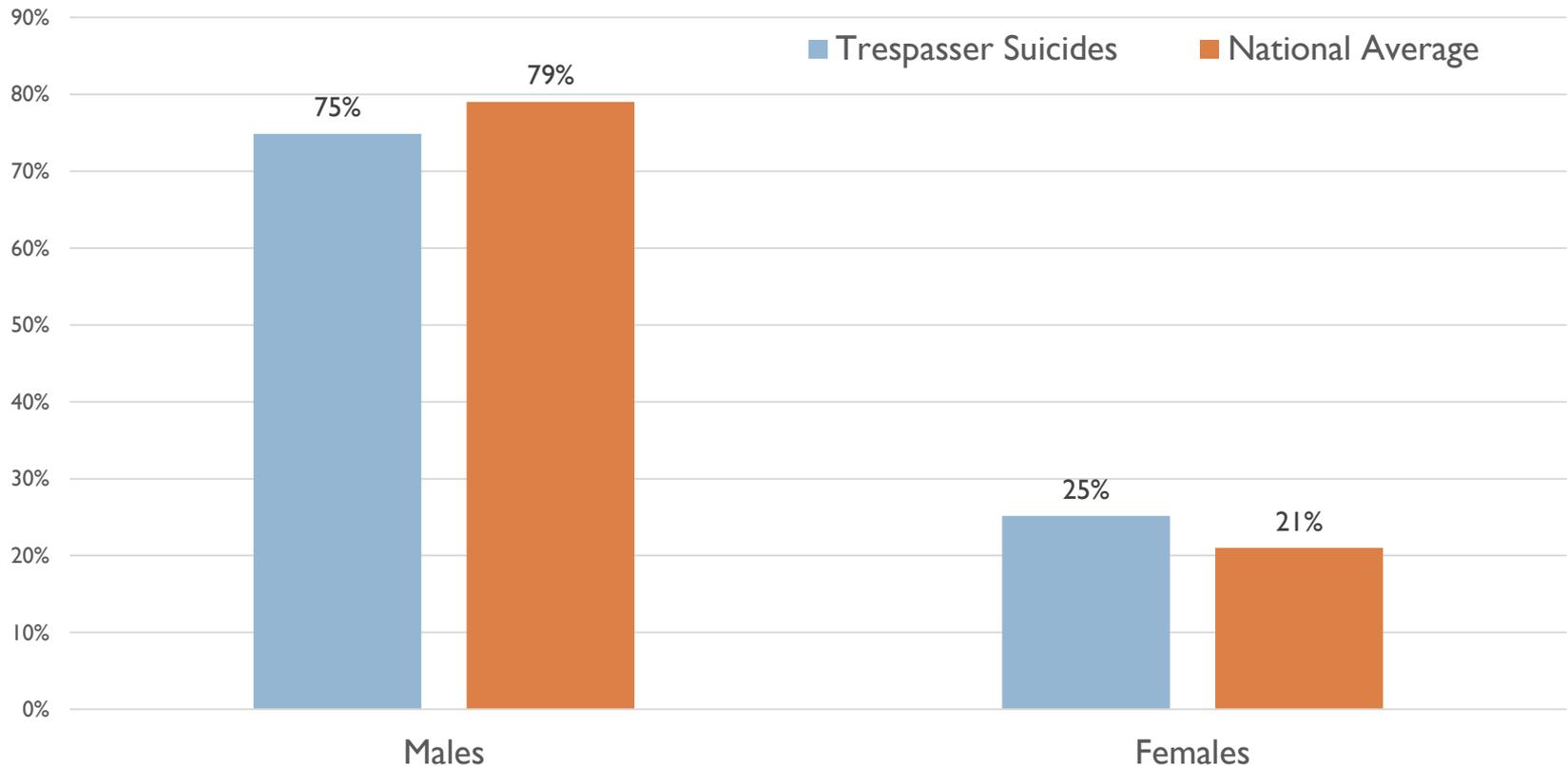
Gender—All Trespassers

Males are much more likely than females to be involved in fatal trespassing incidents.



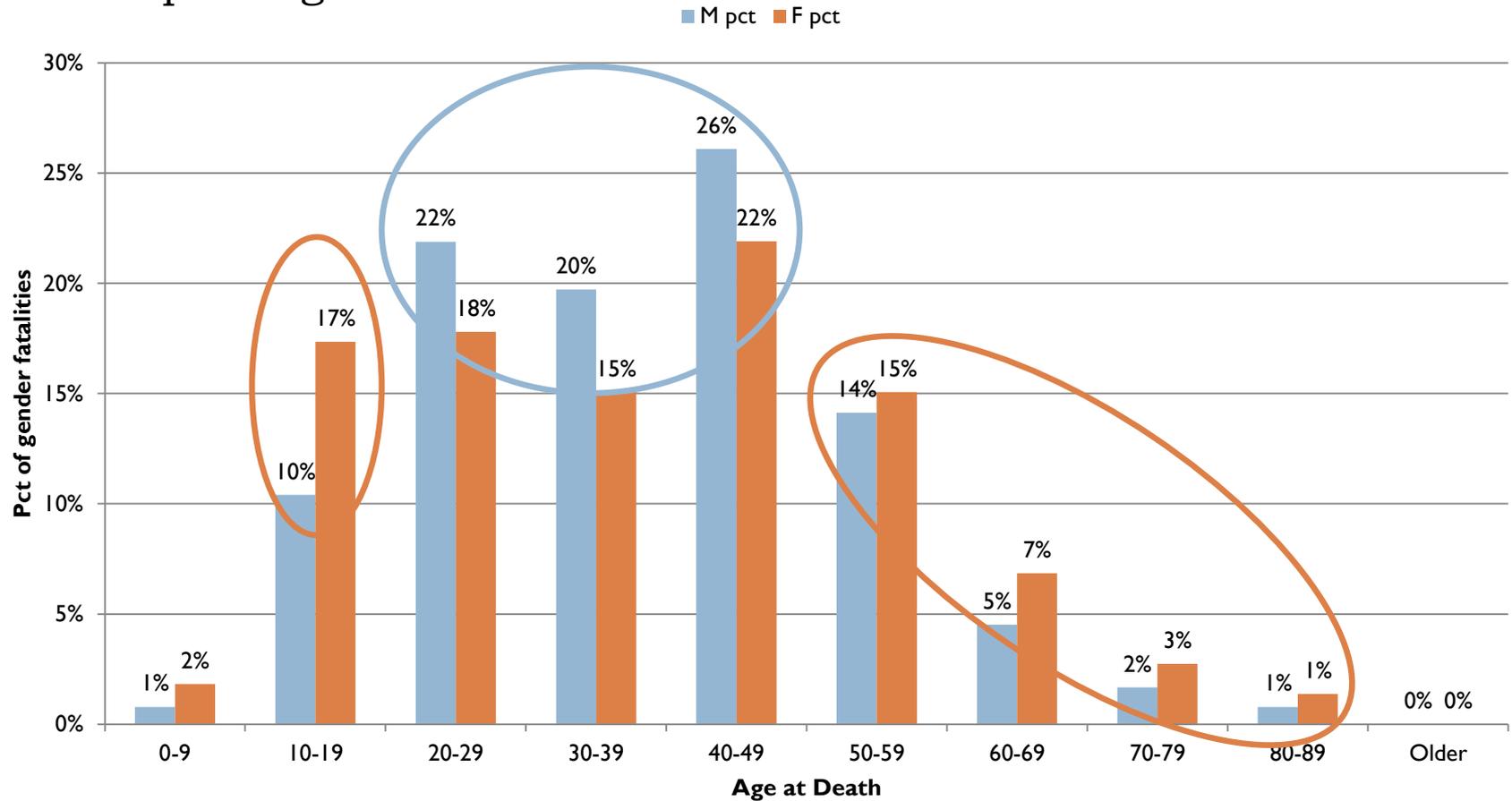
Gender—Suicide

Compared to national suicide averages, males are slightly less likely to choose railroads as a means of suicide, but are still much more likely than females to commit suicide in general.



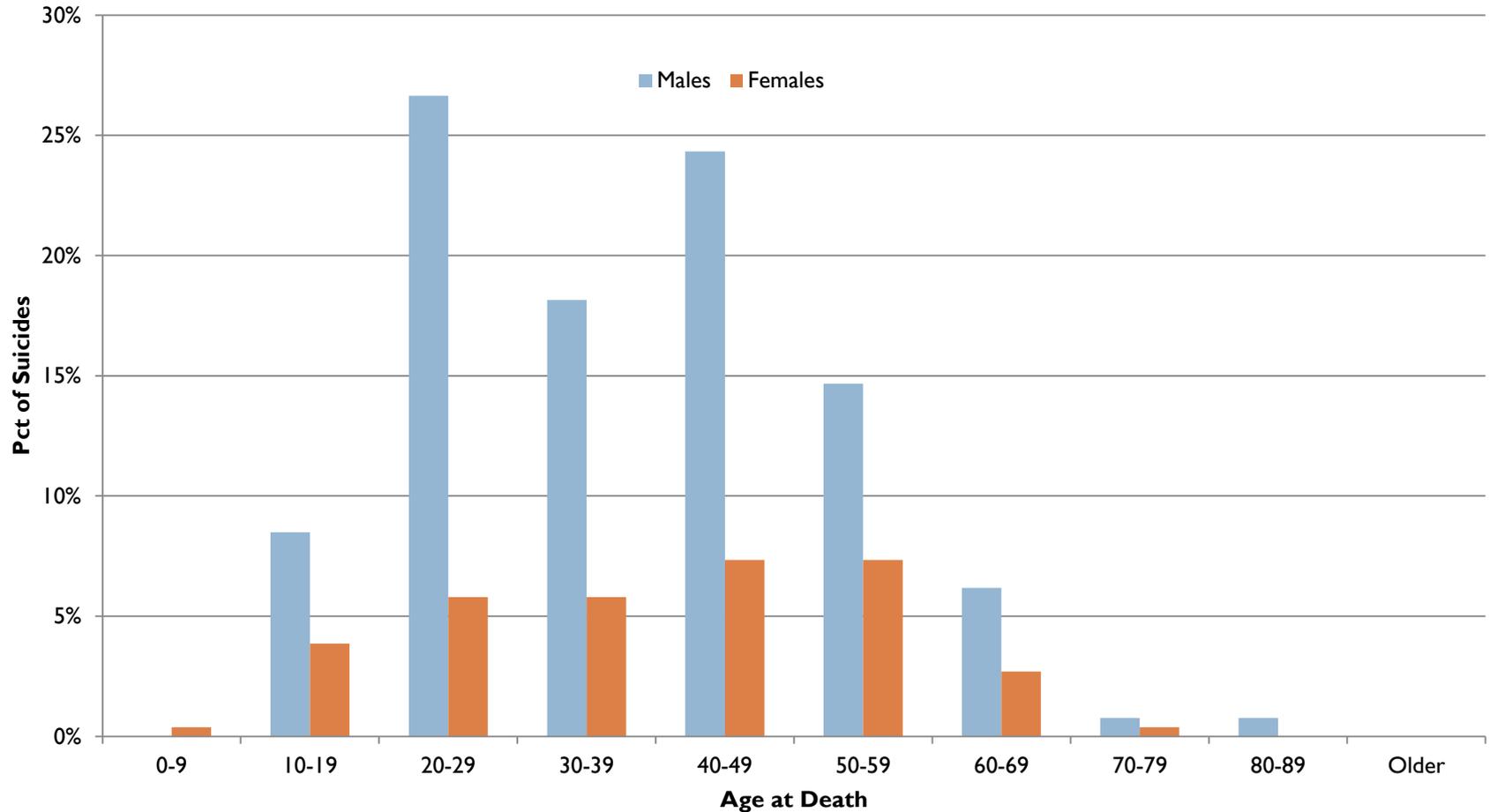
Gender by Age—All Trespassers

Younger and older females are more likely than males to be involved in fatal trespassing incidents.



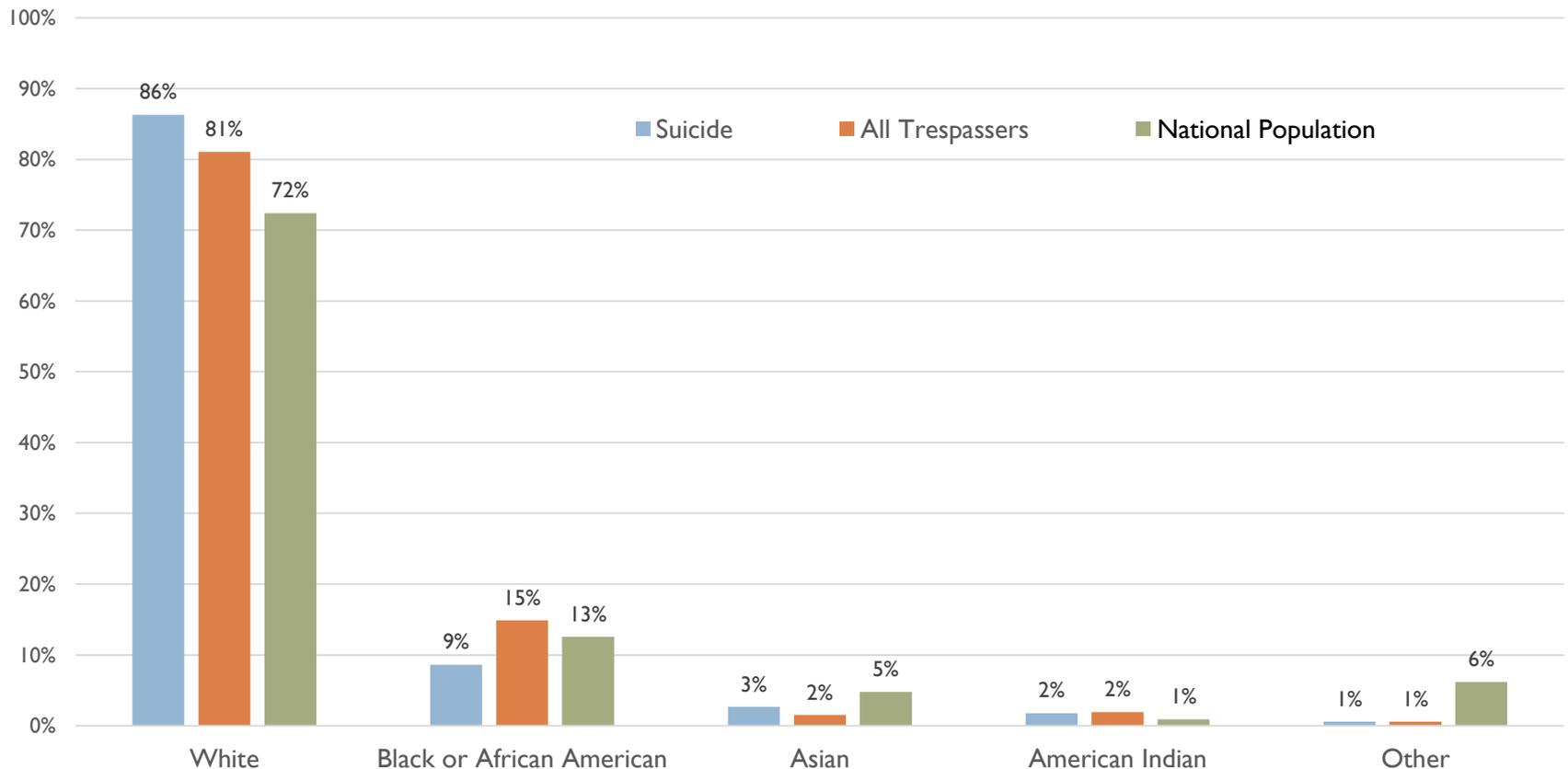
Gender by Age--Suicide

There is not gender/age interaction for suicides.



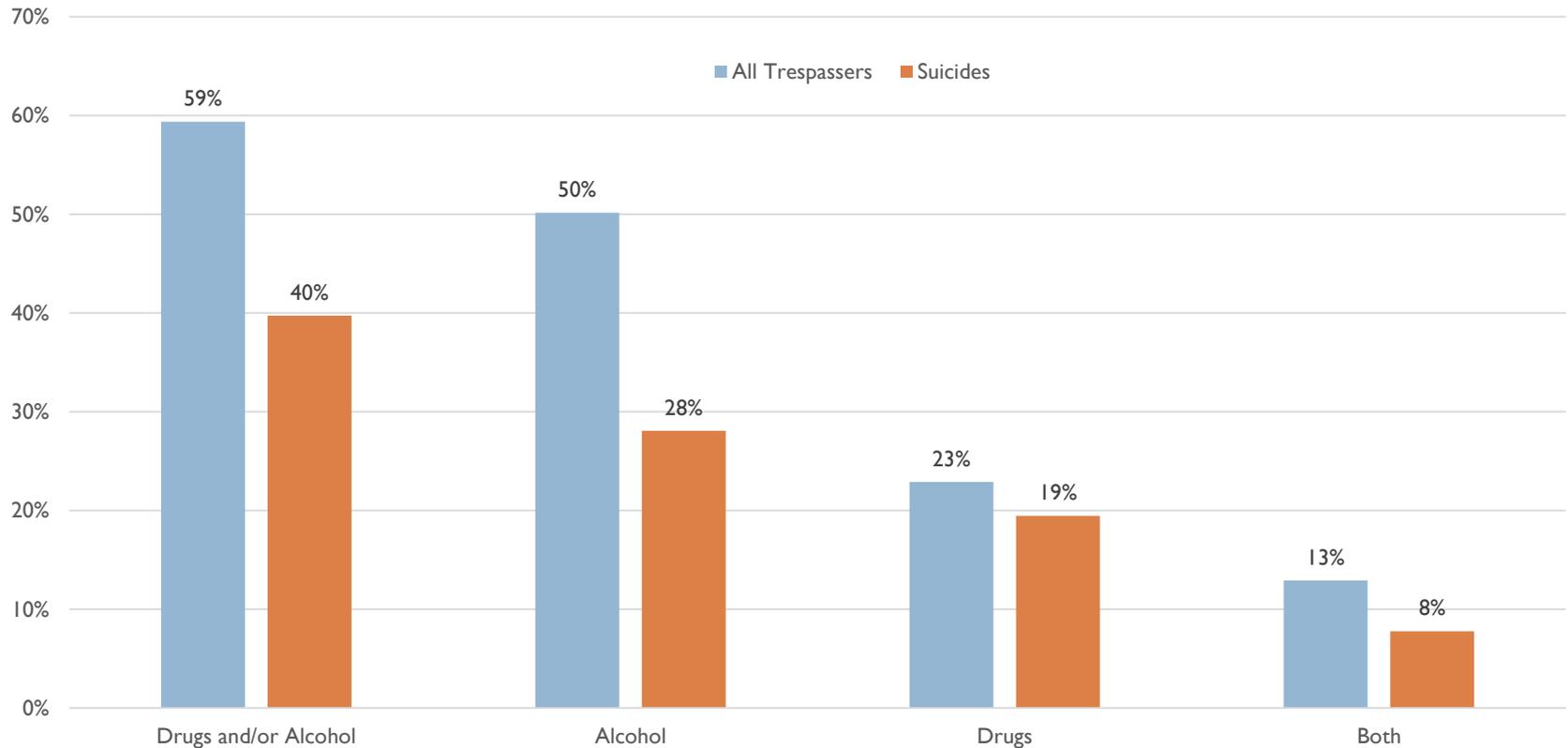
Race—All Trespassers and Suicide

Whites and, to a lesser extent, African Americans over index in fatal trespassing incidents generally. Whites are even more likely to commit suicide but African Americans are actually less likely than the national average.



Drugs and Alcohol—All Trespassers and Suicide

Drugs and alcohol are significantly less likely to be involved in suicides than they are in trespassing fatalities generally.



Market Analysis*

- ▶ The goal of the market analysis was to develop a behavioral profile of decedents to be used in targeted outreach efforts
- ▶ Market analysis approach
 - ▶ Consumer and psychographic data were appended to demographic data from coroners/CMEs
 - ▶ Matches to decedents were made at the Zip+4 and generic zip code level for 958 of the 1,429 returned forms
 - ▶ Used Acxiom, industry-leading data provider, and the Personix cluster segmentation solution

*It is important to note that the following analysis refers to all trespasser fatalities and not to suicides specifically; Small sample sizes preclude the ability to conduct the necessary analyses; Future research is recommended to accurately define psychometric profiles of persons committing suicide on railroad rights of way.

Example of Appended Data

Demographic data from CMEs

Consumer/demographic data appended from Acxiom

Psychographic data appended from Acxiom

Name	Age	Gender	Marital status	Est. house hold income	Dwelling type	Education	Online purchaser	Outdoors enthusiast	Polit. leaning	Personicx Cluster
John Doe	33	M	Married	\$34000	Apt.	H.S.	No	Yes	Conserv.	Great Outdoors



Market Analysis Results

- ▶ **Personicx Clusters** are statistically-identified groupings representative of segments of the US population
 - ▶ Employed by marketers to define target audiences for marketing campaigns
 - ▶ Decedents mapped into 64 of the 70 clusters

Personicx Cluster Results

Cluster Names	% of Decedents	National Norms	Sample Index
KIDS & RENT	11.75%	2.23%	527%
RESILIENT RENTERS	3.24%	0.79%	410%
RESOLUTE RENTERS	5.83%	1.53%	381%
STILL TRUCKIN	2.19%	0.68%	322%
EARLY PARENTS	4.46%	1.39%	321%
DOWNTOWN DWELLERS	5.35%	1.71%	313%
HUMBLE HOMES	3.81%	1.70%	224%
THE GREAT OUTDOORS	2.35%	1.06%	222%
TRUCKIN & STEELIN	1.40%	0.60%	162%
MOBILE MIXERS	3.08%	1.73%	178%
HOME COOKING	1.94%	1.22%	159%
MID AMERICANA	1.38%	0.92%	150%
DYNAMIC DUOS	1.30%	1.12%	116%
RURAL RETIREMENT	2.19%	2.05%	107%
ROLLING STONES	1.05%	0.99%	106%
FUN & GAMES	1.70%	1.72%	99%
CARTOONS & CARPOOLS	1.30%	1.38%	94%
SOCCER & SUVs	1.13%	1.36%	83%
URBAN TENANTS	1.86%	2.29%	81%
FARMLAND FAMILIES	0.81%	1.06%	76%
MODEST WAGES	0.32%	0.45%	72%
CHILDREN FIRST	0.89%	1.28%	70%
PENNYWISE PROPRIETORS	0.32%	0.47%	69%
SHOOTING STARS	0.57%	0.87%	65%
SITTING PRETTY	1.30%	2.03%	64%
COLLEGIATE CROWD	1.13%	1.83%	62%
KIDS & CLOUT	0.49%	0.82%	59%
FIRST DIGS	0.65%	1.15%	56%
URBAN SCRAMBLE	0.73%	1.33%	55%
PENNYWISE MORTGAGEES	0.24%	0.49%	50%
SAVVY SINGLES	1.46%	2.97%	49%
THRIFTY ELDERS	0.57%	1.23%	46%
RURAL PARENTS	0.49%	1.11%	44%
METRO PARENTS	0.97%	2.29%	42%
RURAL EVERLASTING	0.73%	1.75%	42%
RURAL ROVERS	0.49%	1.20%	41%
MIDTOWN MINIVANNERS	0.73%	1.82%	40%
COMMUNITY SINGLES	0.32%	0.82%	40%
YOUNG WORKBOOTS	0.24%	0.66%	37%
FAMILY MATTERS	0.41%	1.10%	37%
FULL STEAMING	0.57%	1.69%	34%
MARRIED SOPHISTICATES	0.16%	0.57%	28%
METRO MIX	0.16%	0.57%	28%
CAREER BUILDING	0.49%	1.73%	28%
WORK & CAUSES	0.24%	0.89%	27%
CORPORATE CLOUT	0.49%	1.78%	27%
DEVOTED DUOS	0.41%	1.52%	27%
SKYBOXES & SUBURBANS	0.24%	1.04%	23%
ESTABLISHED ELITE	0.57%	2.74%	21%
SPOUSES & HOUSES	0.08%	0.44%	18%
CLUBS & CAUSES	0.32%	1.88%	17%
SUBURBAN SENIORS	0.32%	1.95%	17%
OUTWARD BOUND	0.16%	0.99%	16%
CITY MIXERS	0.08%	0.65%	12%
SOLID SINGLE PARENTS	0.41%	3.37%	12%
APPLE PIE FAMILIES	0.41%	3.48%	12%
RAISIN' GRANDKIDS	0.32%	2.79%	12%
PLATINUM OLDIES	0.24%	2.23%	11%
COUNTRY WAYS	0.16%	1.53%	11%
COUNTRY COMFORT	0.16%	1.58%	10%
HARD CHARGERS	0.08%	0.96%	8%
TIMELESS ELDERS	0.08%	1.21%	7%
LAVISH LIFESTYLES	0.16%	2.50%	6%
ACRED COUPLES	0.08%	1.38%	6%
SOLO AND STABLE	0.00%	0.55%	0%
FIRST MORTGAGE	0.00%	-0.69%	0%
COUNTRY SINGLE	0.00%	0.70%	0%
SUMMIT ESTATES	0.00%	1.15%	0%
TOTS & TOYS	0.00%	1.64%	0%
CAREER CENTERED SINGLES	0.00%	2.17%	0%

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Key Themes from Market Analysis

- ▶ Likely to be renters
- ▶ Single- or multi-unit dwellings in second-tier cities
- ▶ Lower income and educational levels
- ▶ If children in the households, parents likely to be in 20's or 30's
- ▶ Subset of decedents from more rural areas and likely less socially engaged

Major Findings

- ▶ About 28% of fatalities identified by CMEs were deemed suicide.
- ▶ Persons under age are more likely than average to choose railroads as a means of suicide.
- ▶ Males are more likely to commit suicide than are females (regardless of age) but females are more likely than average to choose railroads as a means of suicide.
- ▶ Whites are more likely than the average population to commit suicide on railroad ROWs and African Americans are less likely than average.
- ▶ Drugs and/or alcohol are associated with approximately half of all railroad fatalities, although they are involved in relatively fewer suicides than non-suicide fatalities.
- ▶ Railroad-trespasser fatalities are likely to be renters in second-tier cities and from lower income and educational levels. A subset of decedents is from more rural or isolated areas.

Marketing Recommendations

- ▶ Focus marketing efforts on one or both of two market segments:
 - ▶ Younger (approx. 30-45), lower income (net worth <\$50K), urban renters in second-tier cities with railroads.
 - ▶ Lower income (net worth <\$100K), rural home owners who are likely to be empty-nesters or couples with no children
- ▶ Focus educational programs in areas that are close to railroad lines.
- ▶ Partner with organizations that address drug and/or alcohol issues to create targeted campaign focused on appropriate market segments.

For Additional Information
Concerning this Presentation.

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