




## Store Characteristics

- Observed Store Type
    - Standard criteria based on milk and raw meat
    - May differ from SIC code
  - How many cash registers
    - Proxy for Store Size
  - Drive-Through/Kiosk Only
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# The US Alcohol POP Environment: 2000-2001

- Since alcohol purchasing patterns vary by store type, does the alcohol-related POP environment also vary by store type?
  - Data collected in 2000 and 2001
  - Focus: alcohol advertising and functional objects, and beer placement
- Does beer price and promotion vary by characteristics of communities, neighborhoods, and stores?
  - Data collected in 2000
  - Focus: beer price and promotions.

# Methods

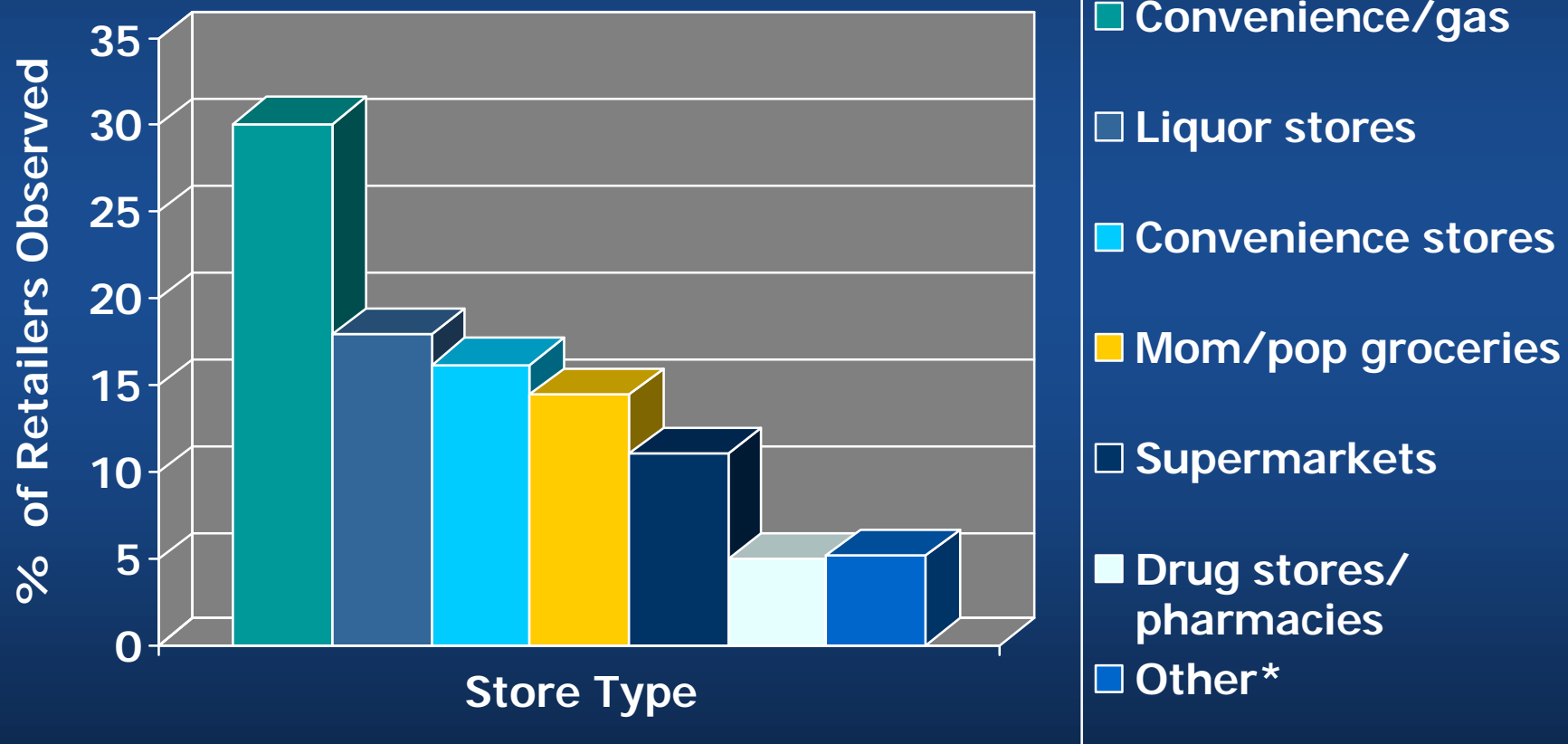
- Communities surrounding schools participating in nationally representative surveys of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students
- Target of 30 retailers per community (either tobacco or alcohol, randomly selected by SIC codes)
- Two-person field staff observation teams
- Data weighted to account for community clustering and store selection probabilities

# Measures: Advertising, Placement, and Functional

Years: 2000-2001. N=3,961 retailers in 329 communities.

- Any alcohol POP marketing: exterior, interior, or property advertising; alcohol-branded functional objects
- High-intensity advertising
- Low-height advertising
- Alcohol control or counter-alcohol signage
- Presence of alcohol-branded functional objects
- Beer placement

# Community Alcohol Retailers (N=3,961)



\* Includes gas stations, general merchandise, tobacco stores, and other

# Overall Alcohol POP Marketing

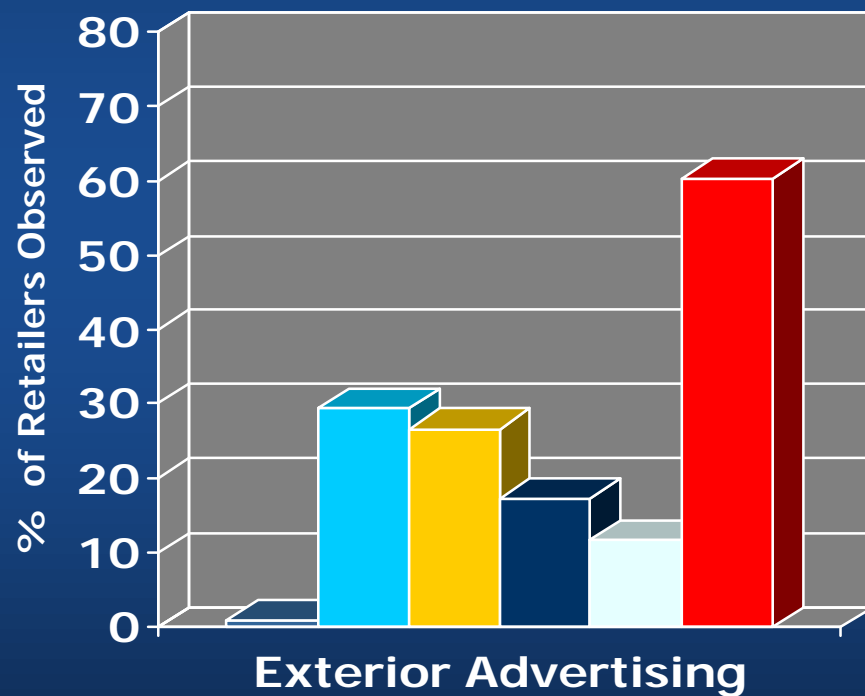
- 94% of all stores had some form of POP marketing (advertising or functional objects)

## Advertising: Exterior and Interior

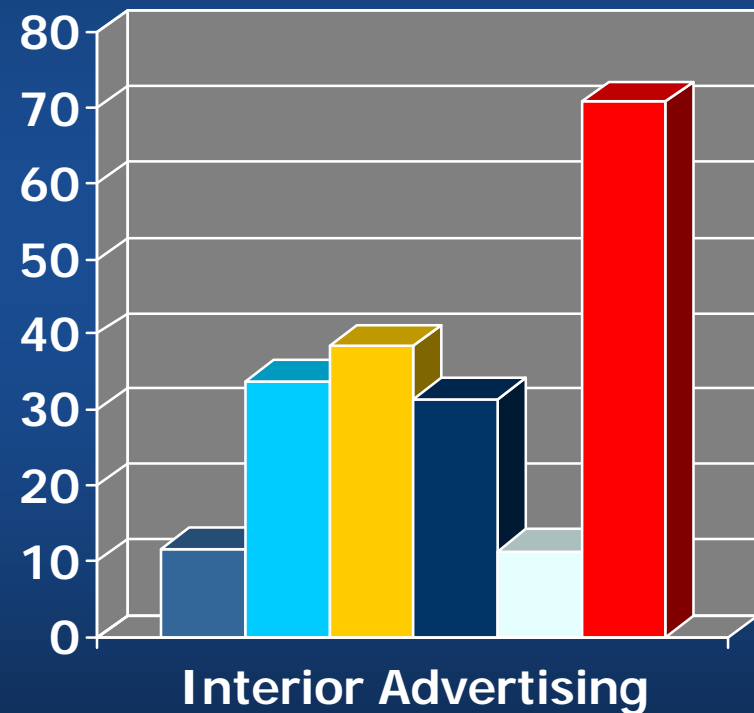
- 92% had interior alcohol ads
  - 37% were categorized as “high-intensity”
- 39% had exterior alcohol ads
  - 27% were categorized as “high-intensity”
- 48% had alcohol control or counter-alcohol signage

# High-Intensity Advertising

■ Supermks ■ Convn ■ Convn/gas □ Grocery ■ Drug ■ Liquor



All store types significantly higher than supermarket referent ( $p < .001$ )



All store types except drug stores significantly higher than supermarket referent ( $p < .001$ )



## **Low-Height Interior Advertising**

- 44% of all stores with interior alcohol advertising had some ads at a height of 3½ feet or less (child's eye height)

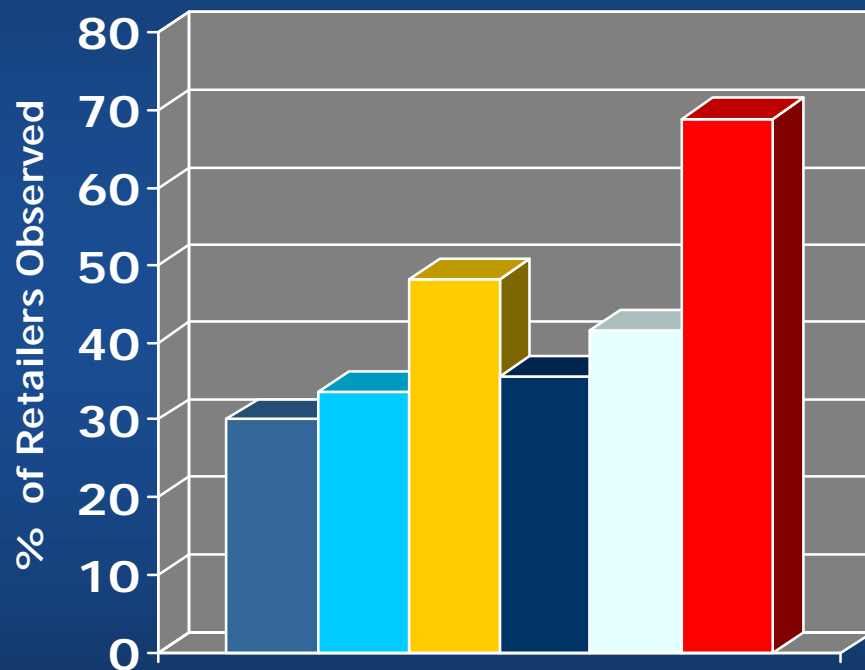
## **Functional Objects**

- 51% of all stores provided at least one alcohol-branded functional object.



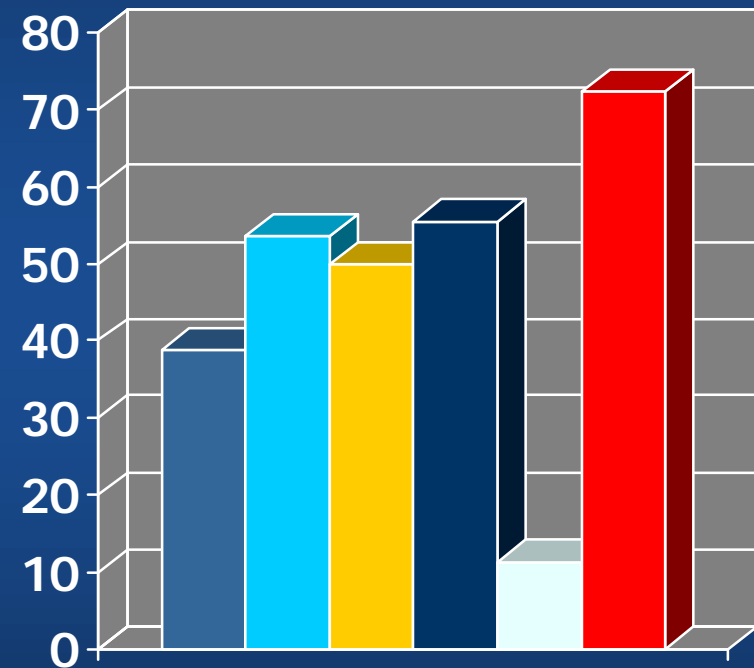
# Low-Height Ads and Functional Objects

■ Supermkt ■ Convn ■ Convn/gas ■ Grocery ■ Drug ■ Liquor



**Low-Height Ads**

Convenience/gas and liquor stores significantly higher than supermarket referent ( $p < .001$ )



**Functional Objects**

Convenience, grocery and liquor stores significantly higher than supermarket referent ( $p < .05$ ). Drug stores significantly lower ( $p < .05$ ).

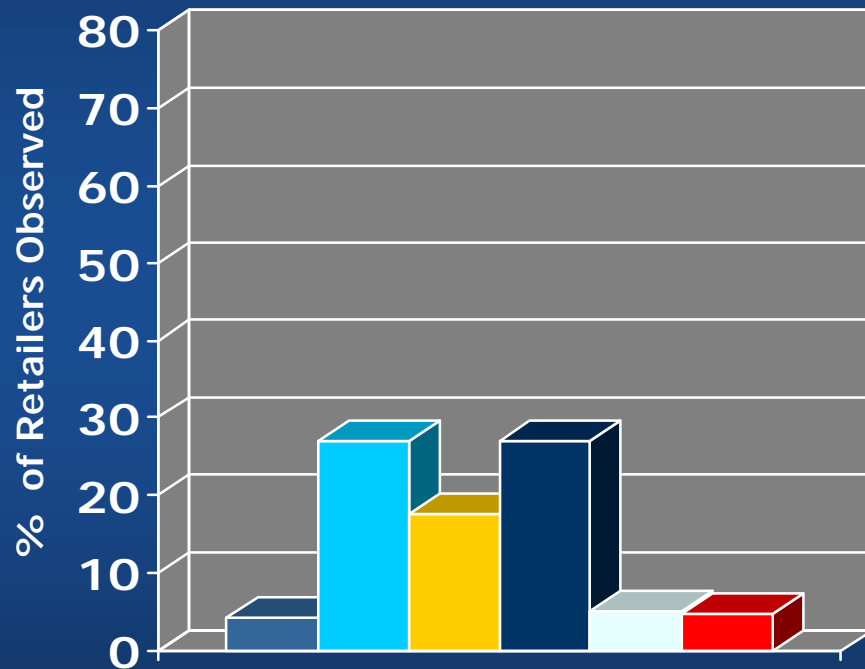


## Beer Placement

- Behind counter or locked/closed cabinet 1%
- Coolers 96%
- Floor displays 44%
- Shelves 23%
- Singles in ice buckets 16%

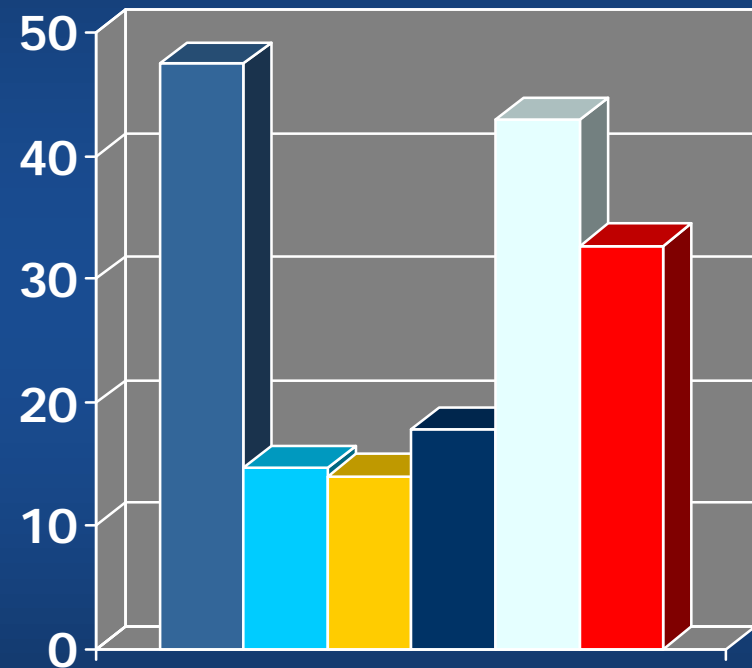
# Beer Placement

■ Supermkt ■ Convn ■ Convn/gas ■ Grocery ■ Drug ■ Liquor



**Singles in Ice Bucket**

Convenience, convenience/gas and grocery stores significantly higher than supermarket referent ( $p < .01$ )



**On Shelf**

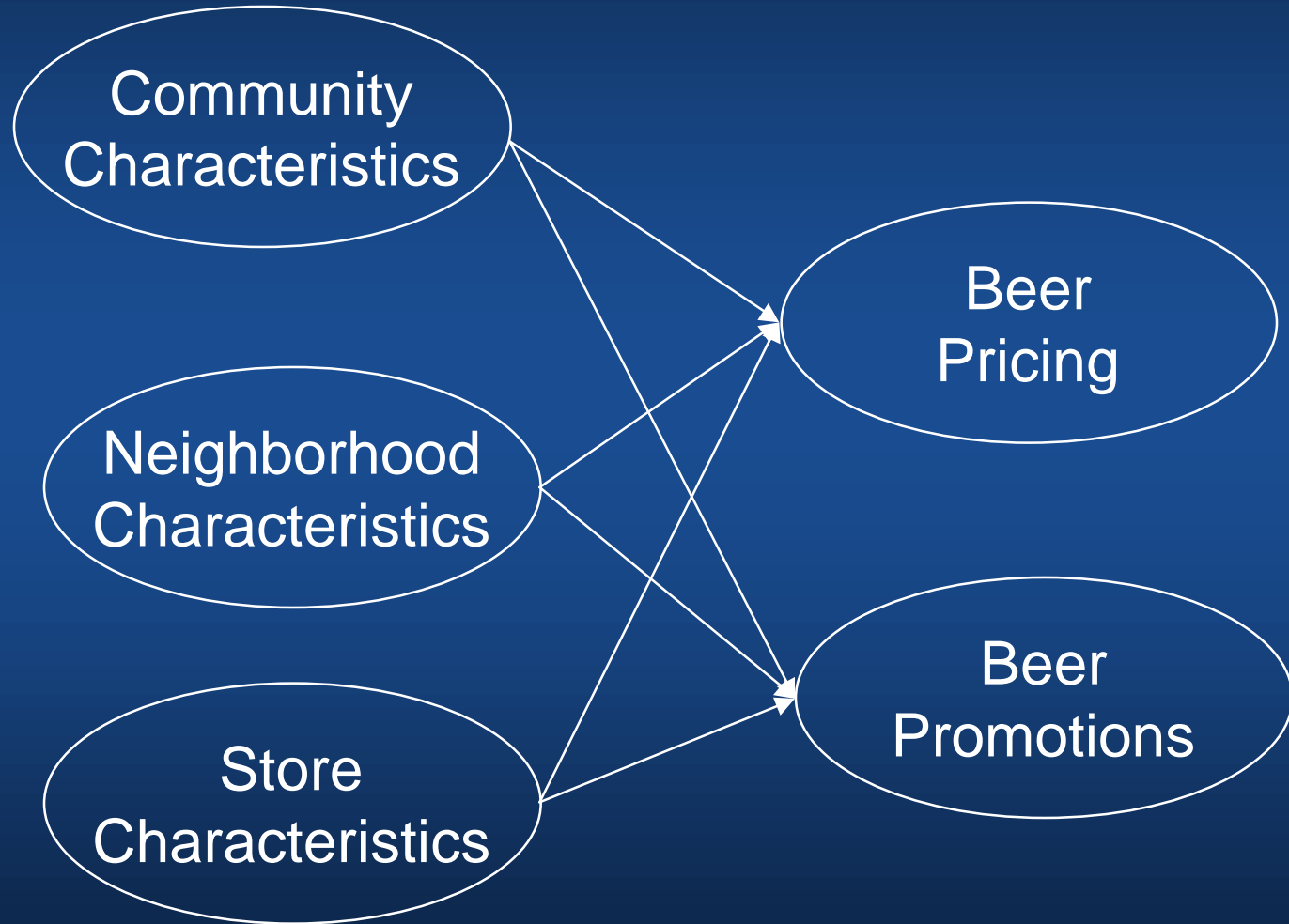
All store types but drug stores significantly lower than supermarket referent ( $p < .05$ ).



## **Variations in Beer Price and Promotions in Retail Stores: 2000**

- ❑ 160 communities across the U.S.**
  - ❑ 2,024 Retail Stores**
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# Conceptual Model





# Outcome Variables

- Price (\$\$)

  - 6-pack of Budweiser or Miller (Mean=\$4.71)

- Promotions (Some “1” or None “0”)

  - (25% of stores have “some” promotions)

    - discount offers

    - special prices

    - freebies

    - coupons






# Independent Variables

## *Community Characteristics (School Catchment Area)*

### U.S. Region

- Northeast (12%)
- South (44%)
- Midwest (17%)
- West (27%)

### Urbanicity/population density

- Urban (70%)
  - Suburban (6%)
  - Town (11%)
  - Rural (13%)
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# Independent Variables, cont.

## *Neighborhood Characteristics (Census block)*

Median household income (\$\$)

-- Mean=\$39,280

Racial diversity (% white)

-- Mean=78%

Youth population (% of whole)

-- 12-17 year olds (Mean=8%)

-- 18-20 year olds (Mean=9%)








# Store Characteristics (Observed)

## ☐ Store type

- Gas station convenience (38%)
- Liquor store (18%)
- Convenience store (14%)
- Grocery (11%)
- Supermarket (9%)
- Drug store/pharmacy (6%)


## ☐ Store size - # of cash registers

- 1 = small (60%)
  - 2 = medium (19%)
  - 3 + = large (21%)
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# Statistical Methods

## □ Cross-sectional hierarchical regression models

- nesting of stores in communities
  - community as random effect
  - region, urbanicity, store type and size as fixed effects
  - beer brand as control variable
  - continuous (price) and dichotomous (promotion) outcomes
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# Summary of Findings

Beer *price* varies significantly by:

- ❑ Community characteristics

- Lowest prices in West & Suburbs
- Highest prices in South & Urban

- ❑ Neighborhood characteristics

- Lowest prices in low/moderate income & less racially diverse neighborhoods

- ❑ Store characteristics

- Lowest prices in drug stores & large stores
  - Highest prices in gas convenience & small stores
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# Summary of Findings, cont...

Beer *promotion* varies significantly by:

- Community characteristics

- Least likely in Midwest & Urban
- Most likely in Northeast & Towns

- Store characteristics

- Least likely in convenience & small stores
  - Most likely in drug & large stores
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# Store-Type Variation in Alcohol POP Environment: Analyses Conclusions

- General alcohol marketing
  - Heavy in retail establishments frequented by youth such as convenience stores
- Beer access
  - Attractive pricing in high volume stores typical of suburbs and small towns

## References

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