

Moving the Needle

Using Epidemiologic Methods, Technical Assistance,
and Locally-Tailored Prevention Strategies
to Achieve Sustainable State-Wide Reductions
in Substance Use and Adverse Consequences

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SAMSHA Strategic Prevention Framework
State Incentive Grant Program
– Rhode Island Experience

Think globally
(with epidemiologic evidence)

Act locally
(with technical assistance, logic models
& targeted local intervention strategies)

Outline

- 1) epidemiologic analyses for state priorities
- 2) identify sub-state regions to target
- 3) produce municipal profiles
- 4) local technical assistance & logic models
- 5) select locally-driven evidence-based prevention strategies
- 6) evaluate change at the local and state level.

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SPF SIG

State Epidemiology Profile

CSAP State Epidemiology Data Set (SEDS)

- 14 consequence indicators related to use/abuse of alcohol, tobacco and other drugs
- 8 consumption indicators related to use/abuse of alcohol, tobacco and other drugs

RI State Consequence and Consumption Priorities

DSM-IV diagnoses of alcohol dependence or abuse

Underage drinking

DSM-IV diagnoses of drug dependence or abuse

Use of marijuana by 9th- 12th graders

Use of illicit drugs by 9th –12th graders

Alcohol related traffic fatalities

Drinking and driving across the lifespan

Drinking and driving grades 9 -12

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Challenge...

1) Limited sub-state, municipal-level data
on priority consequences
(DSM-IV diagnoses of alcohol & drug disorders)

2) Sparse data (motor vehicle fatalities)

“estimating the unobserved” – producing a
composite index at the municipal level

1) Literature review of community-level factors associated with adverse substance abuse consequences

% at or below federal poverty level

population density

% males ages 15-34

% minority

Kreiner et al (2001); Herman-Stahl et al (2001), Buka et al (2006)

Moderate levels of substance use among high school students (statewide survey)

Substance use levels and trends (2000 and 2005)

% of high school students reporting 6+ drinks in
past 30 days

... reporting illegal drug use more than 3 days
during the past 30 days

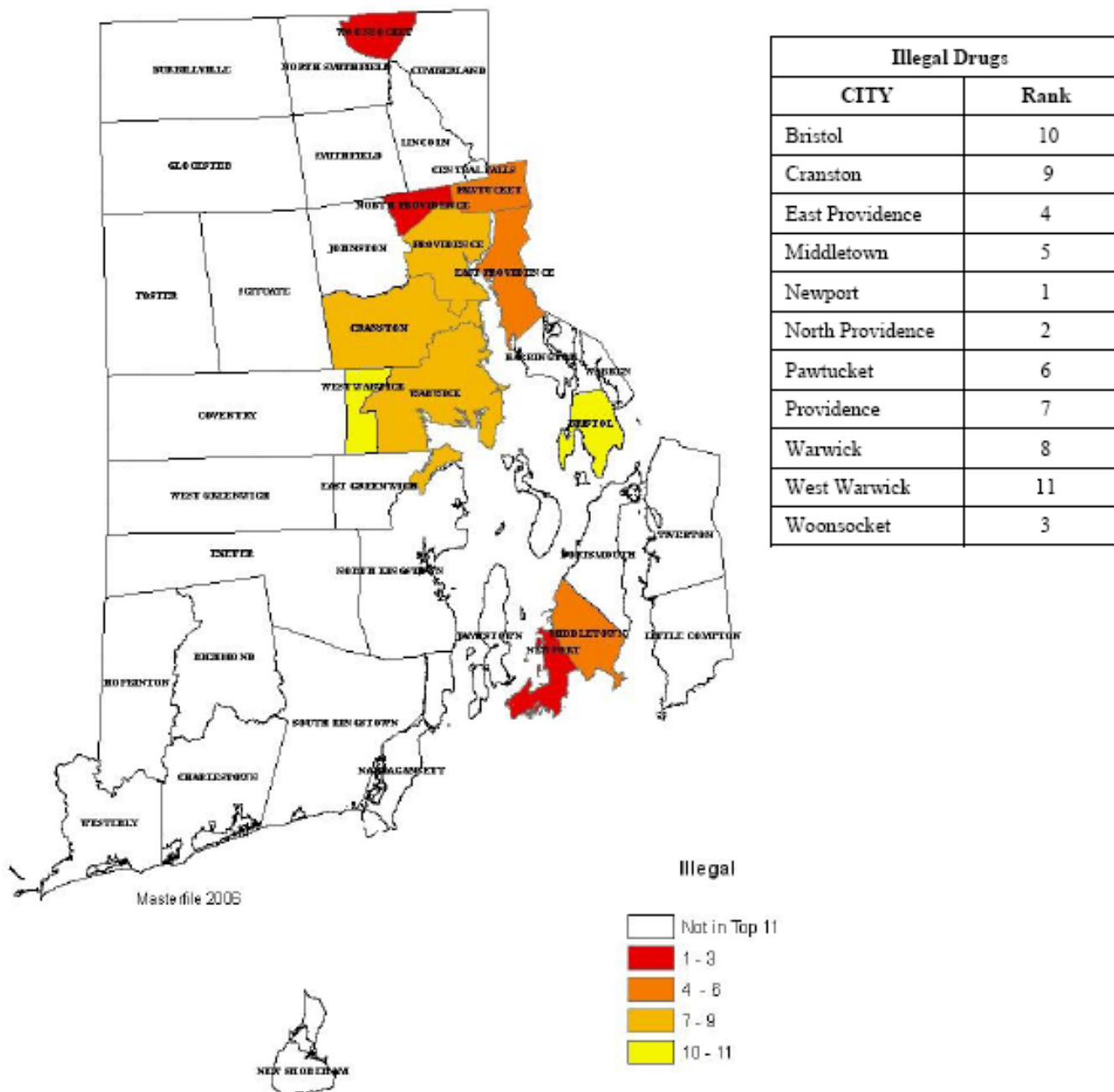
% change 2005 - 2000

Identifying Priority Regions

Ranked composite index of drug and alcohol-related consequences generated for each community

Communities with top composite scores identified as at-risk and targeted

**Figure 3:
Map of RI Municipalities Ranked Highest on Risk for Drug-related Consequences**



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Challenge – how to provide rich (but not overwhelming) epidemiologic data to local municipalities on risks and resources to aid prevention planning

- For each of RI's 39 cities and towns, provided a brief, user friendly set of key indicators describing the magnitude and distribution of:
 - Substance use consequences and consumption patterns
 - Potential risk and protective factors
 - Mental and behavioral health outcomes
 - Temporal, national, regional and within state comparisons and trends

Generic “any town” user guide created to aid interpretation of data and results

ALCOHOL USE	% REPORTING	RANK
Any use (1999-2000):	54	15
Any use (2005-2006):	54	2
Any use (2007-2008):	42	16
% change 99-00 to 05-06:	0.0	3
% change 05-06 to 07-08:	-22.2	37

Moderate use (1999-2000):	20	31
Moderate Use (2005-2006)	32	1
Moderate Use (2007-2008):	23	8
% change 99-00 to 05-06:	60.0	1
% change 05-06 to 07-08:	-28.1	37

Heavy use (1999-2000):	7	32
Heavy use (2005-2006):	17	3
Heavy use (2007-2008):	14	3
% change 99-00 to 05-06:	142.8	1
% change 05-06 to 07-08:	-17.6	31

note:

Any alcohol use = drinking at least one time during the past 30 days
 Moderate alcohol use = drinking six or more times during the past 30 days
 Heavy alcohol use = drinking 20 or more times during the past 30 days

In the 1999-2000 academic year, 20% of high-school students in "Any town" reported drinking 6 or more times during the past 30 days, ranking "Any Town" as 31st of 39 RI communities, and identifying it as a community experiencing relatively low levels of moderate drinking among students attending public high schools on the day the survey was administered.

In the 2005-2006 academic year, 32% of high-school students from "Any Town" reported drinking 6 or more times during the past 30 days, ranking "Any Town" as 1st of all 39 RI communities, and identifying it as a community experiencing the highest levels of moderate drinking that year.

From the 1999-2000 to 2005-2006 school year, moderate drinking among high-school students in "Any Town" increased by 60%. This change was the largest increase in any RI community, ranking "Any Town" as 1st among all 39 RI communities.

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TA Activities

Group TA

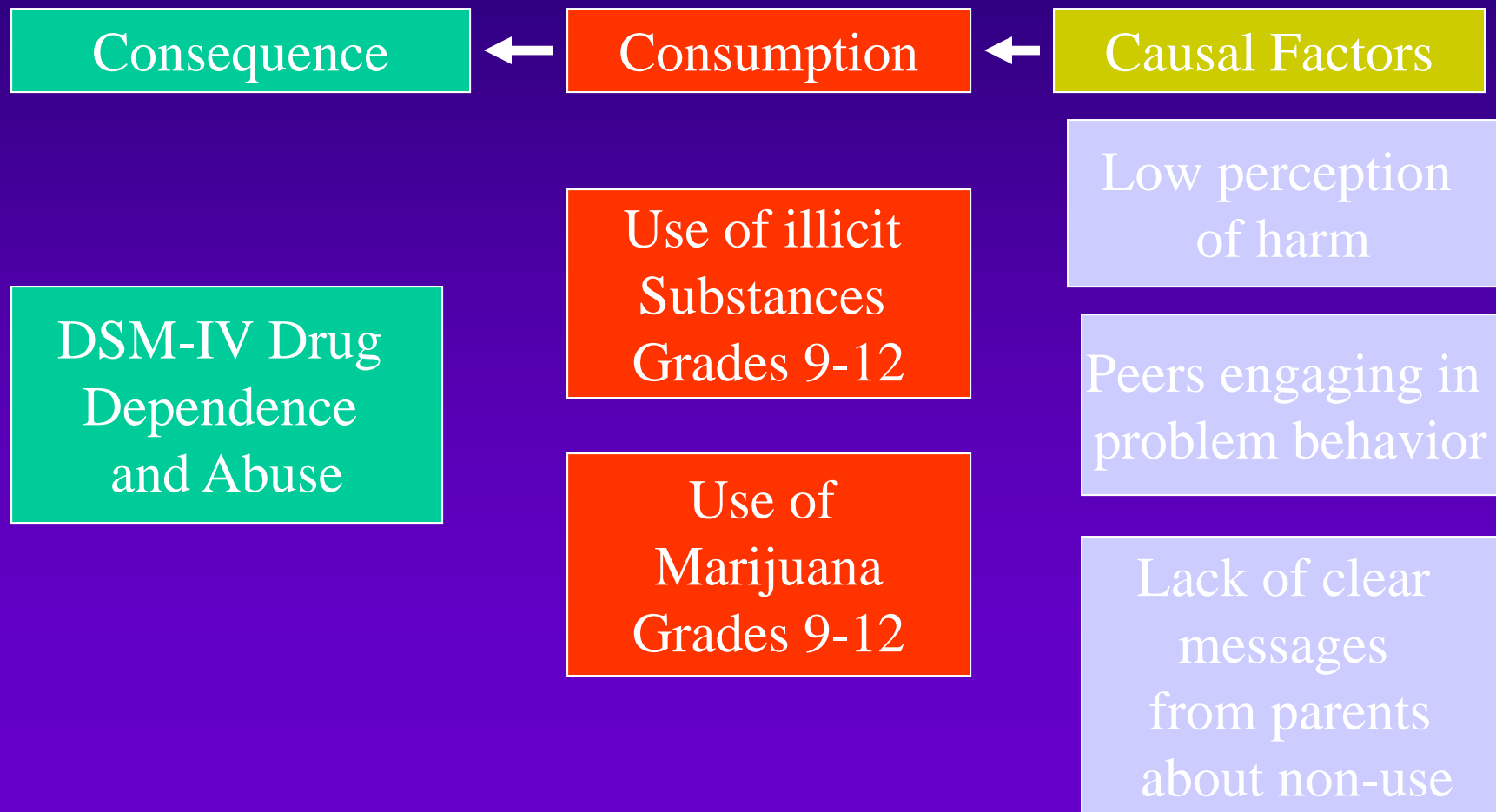
- Organize information for inclusion in plan
- Activities to assist with prioritization of local data
- Standardize assessment & encourage transparency
- Provided structure for local strategic plan

Individualized TA

- Refinement of strategic plans



RI Logic Model – Draft 1



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Local interventions include:

- Access, Monitoring, Education, Media
 - Gate keeper interventions
 - Graduated penalty structures
 - Compliance checks
 - Party checks
 - Media campaigns

Outline

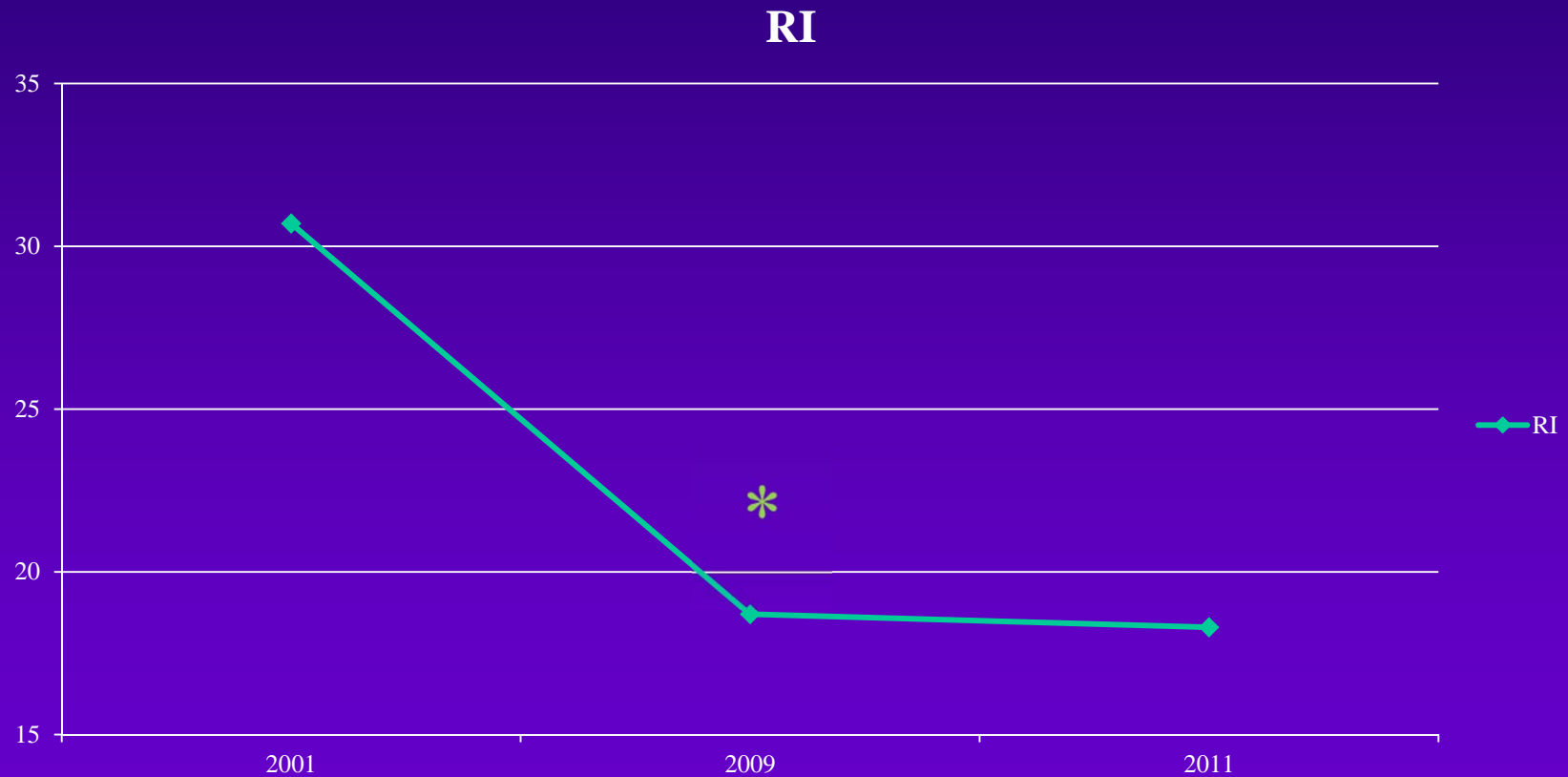
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Moving the state needle

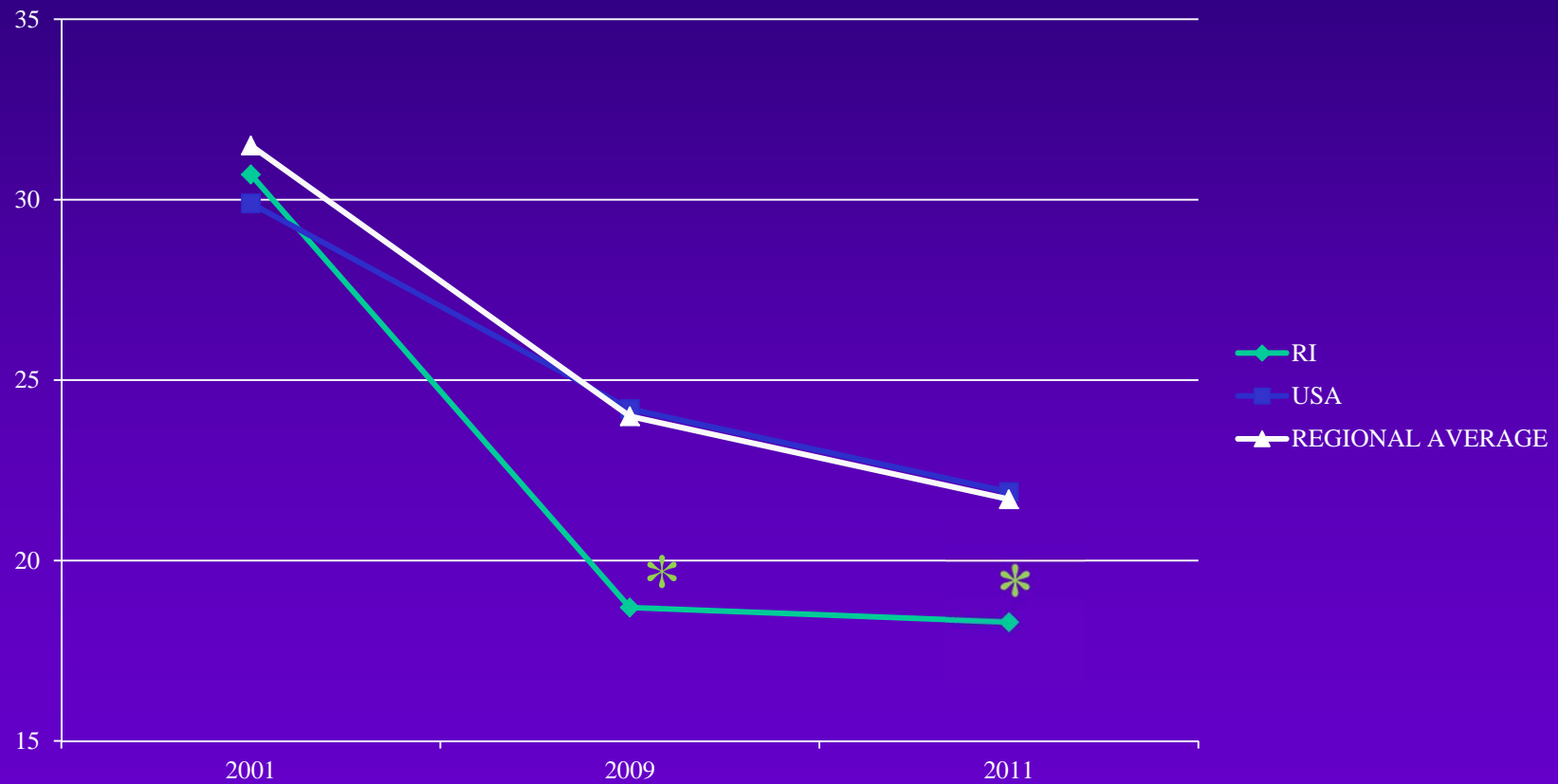
State priorities:

- Underage drinking
- Underage drinking and driving
- Underage marijuana and drug use
- DSM-IV drug and alcohol related diagnoses
- Alcohol-related traffic fatalities

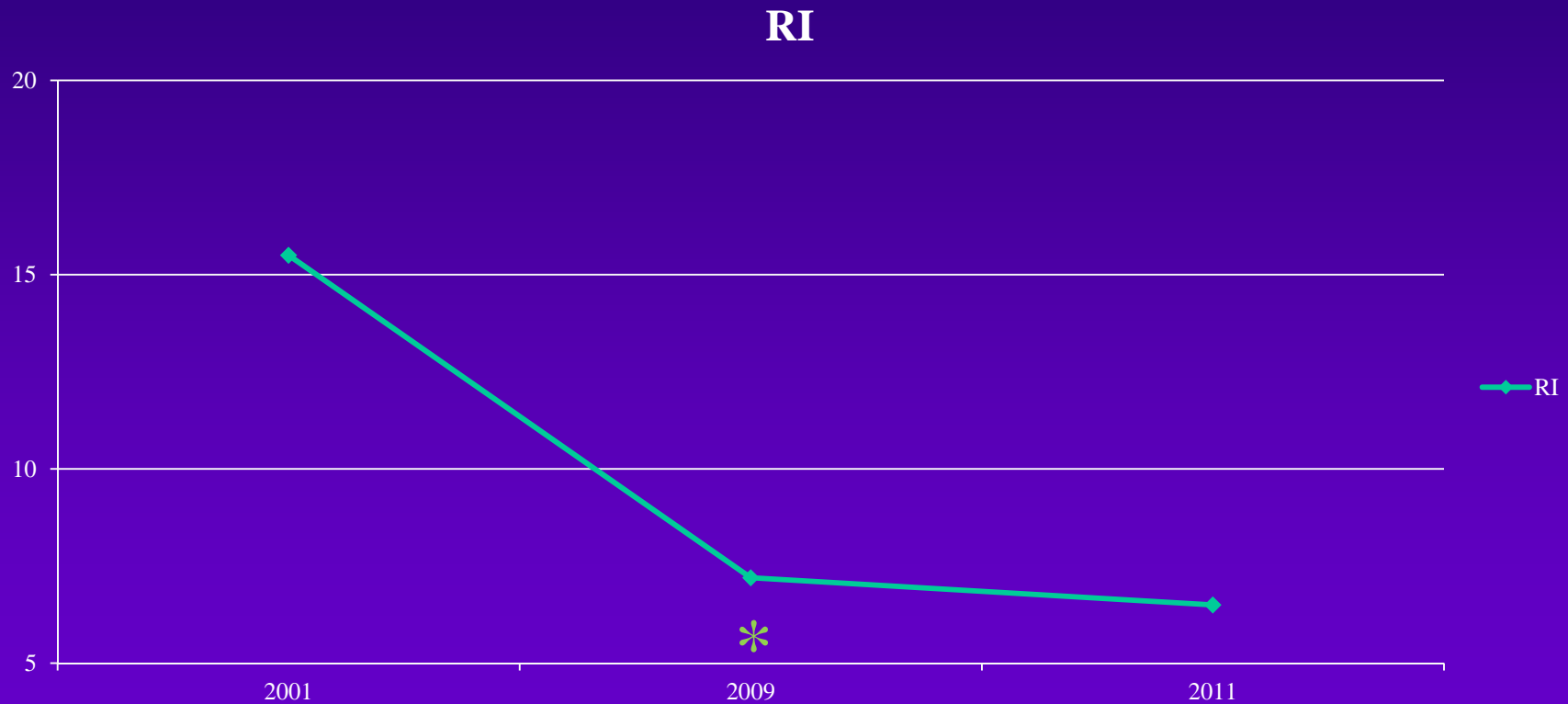
Moving the state needle: Underage binge drinking



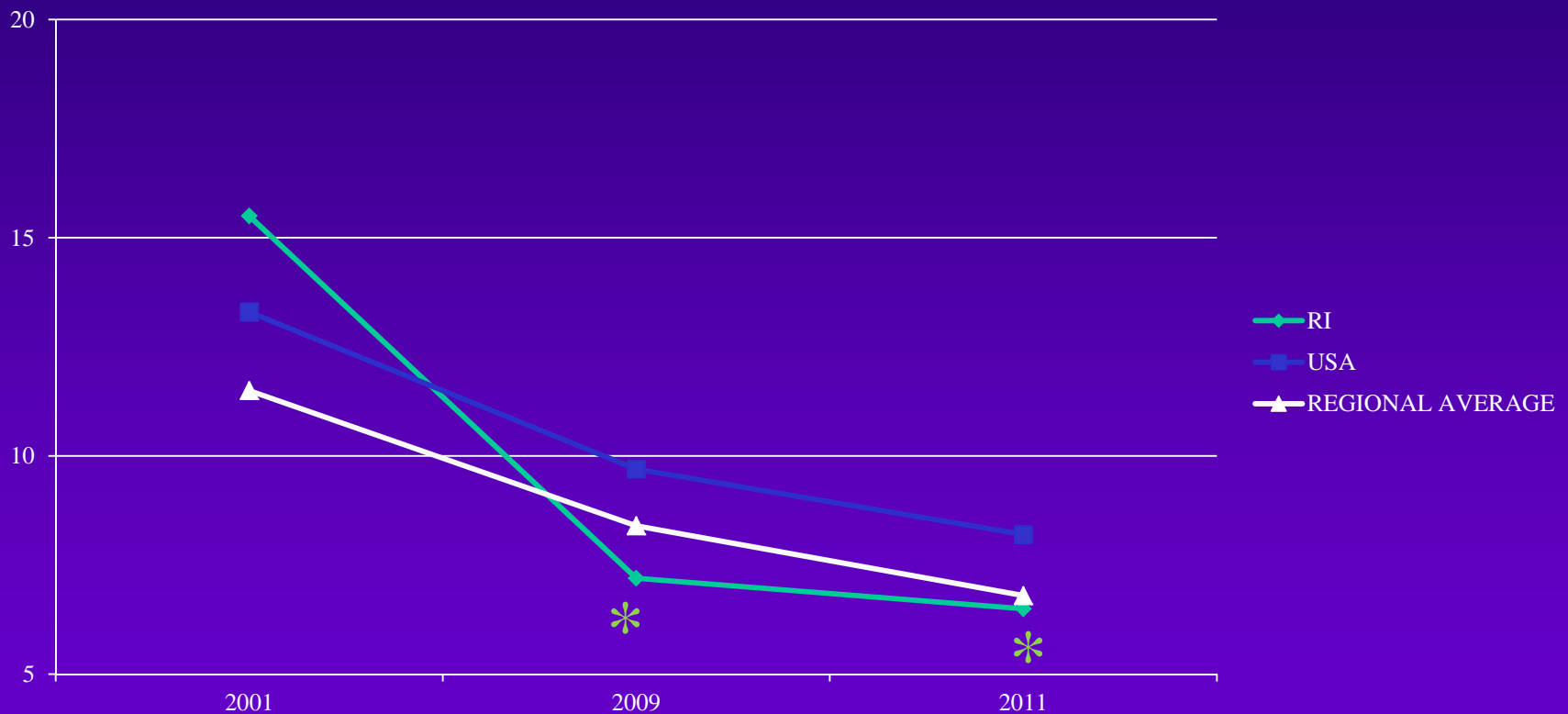
Moving the state needle: Underage binge drinking



Moving the state needle: Underage drinking & driving

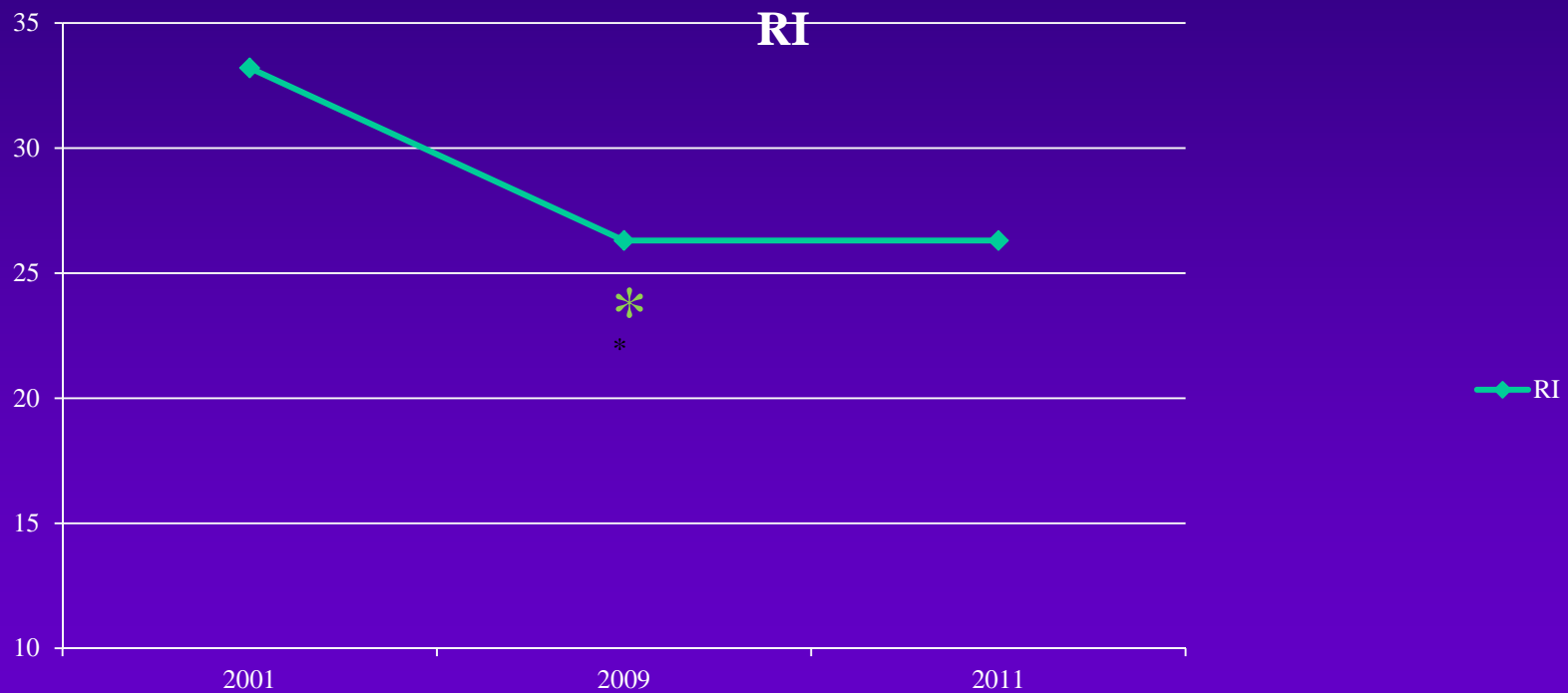


Moving the state needle: Underage drinking & driving



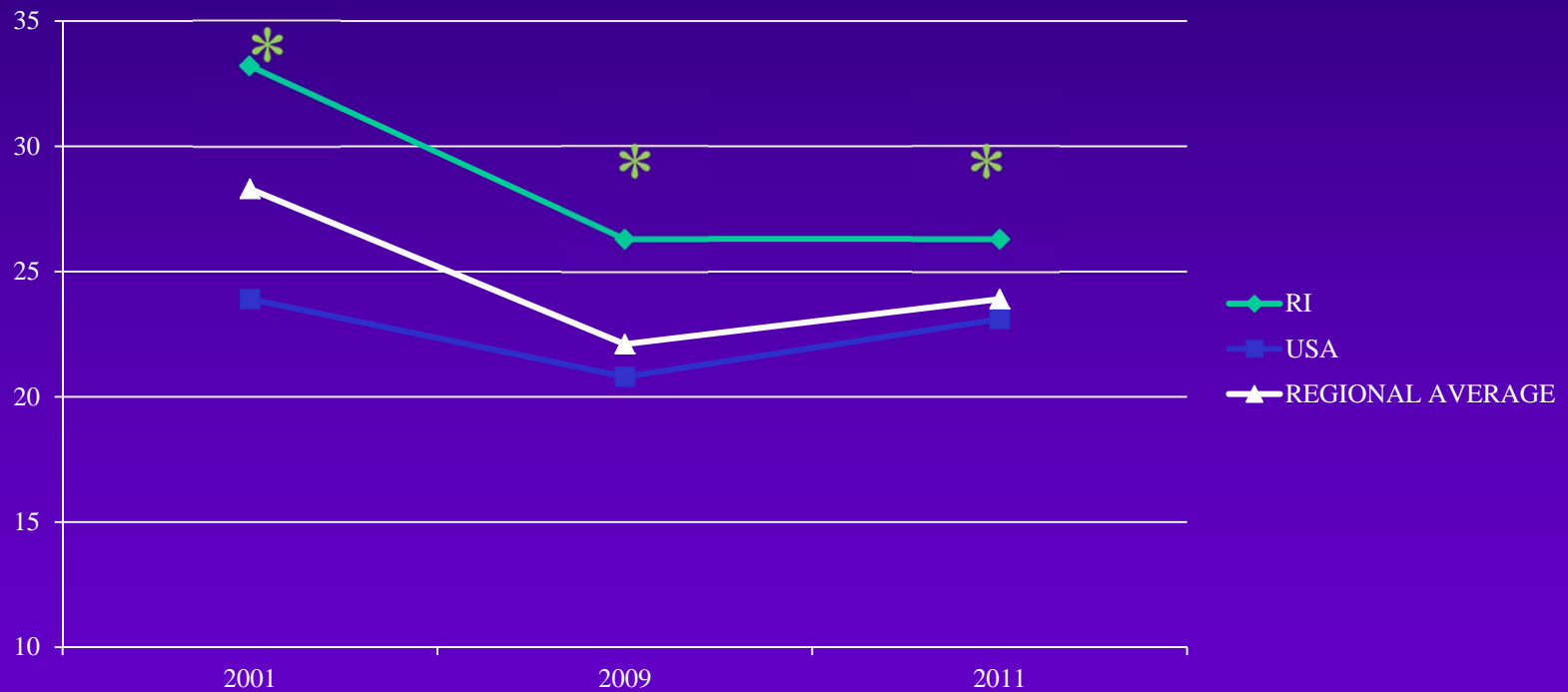
Moving the state needle: Underage marijuana use

Current marijuana use: used marijuana one or more times past month (%)



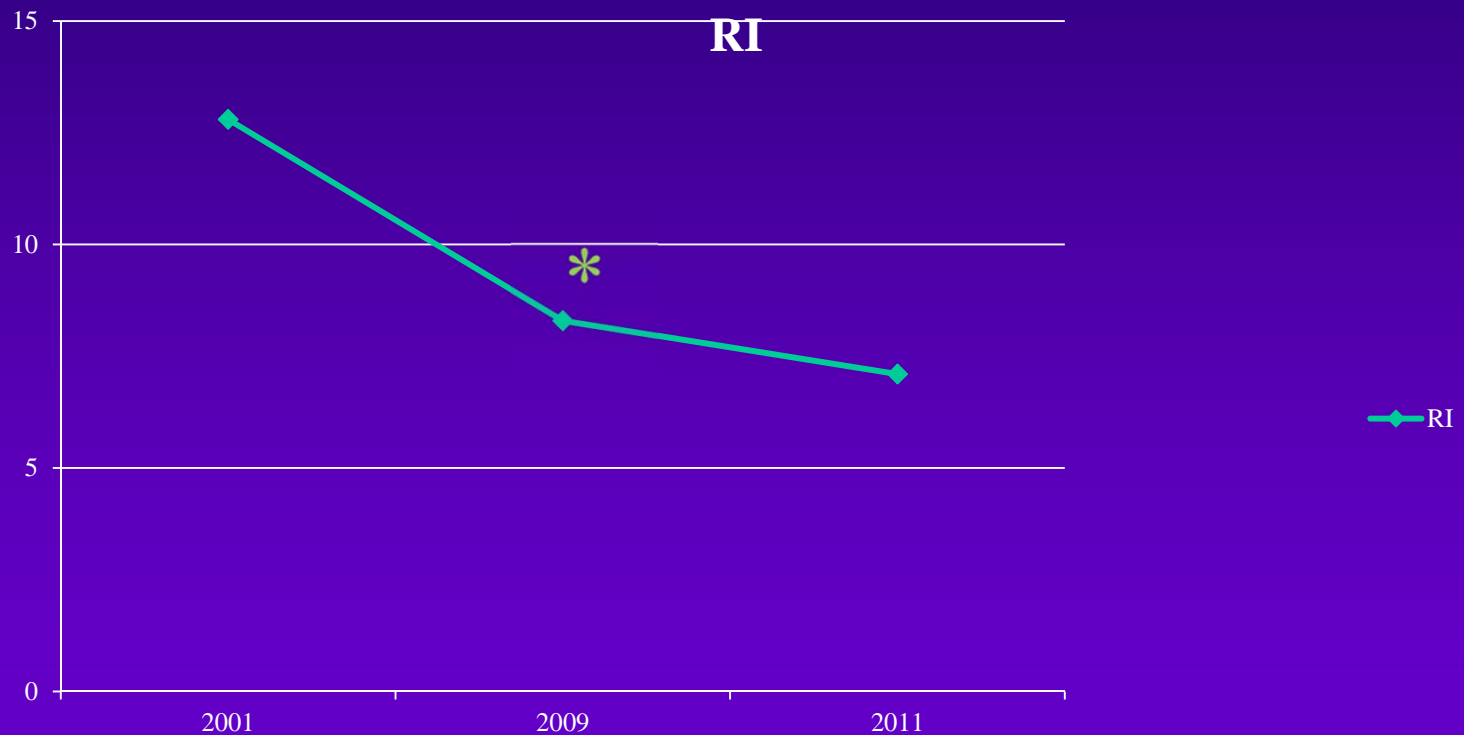
Moving the state needle: Underage marijuana use

Current marijuana use: used marijuana one or more times past month (%)



Moving the state needle: Underage marijuana use

Initial use of marijuana before age 13 (%)



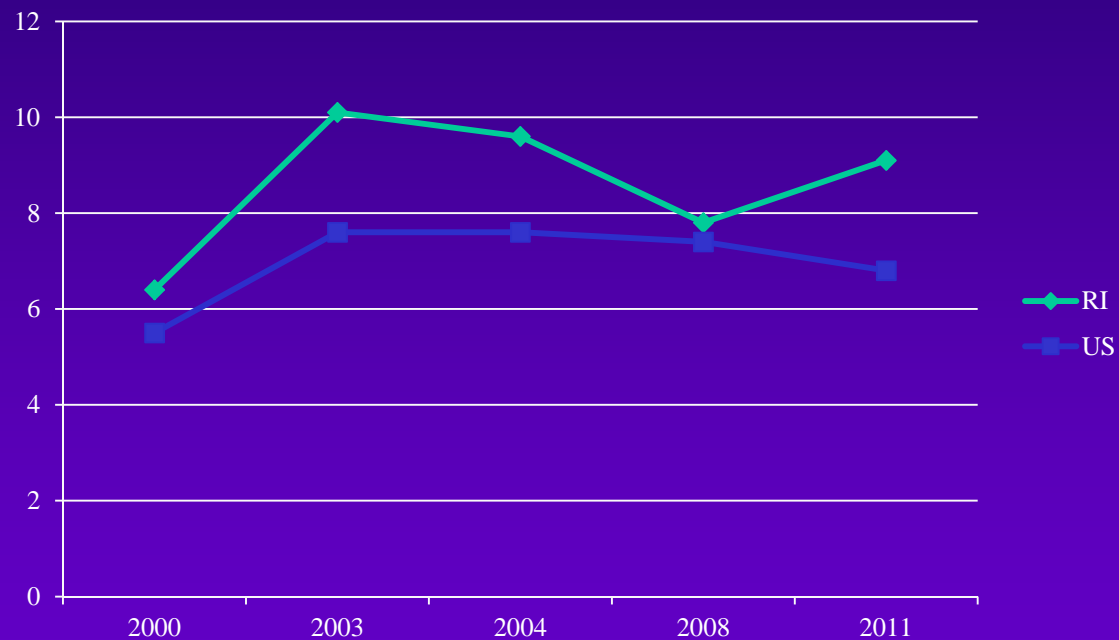
Moving the state needle: Underage marijuana use

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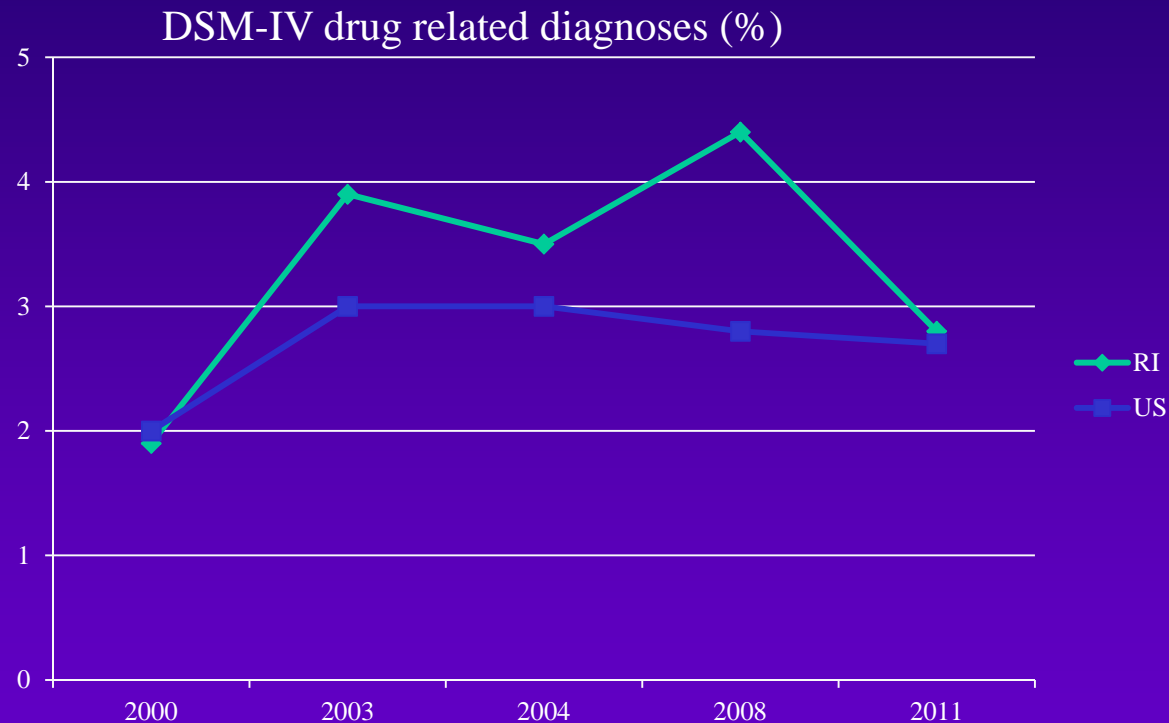


Moving the state needle: RI vs. USA trend comparisons

DSM-IV alcohol related diagnoses (%)



Moving the state needle: RI vs. USA trend comparisons



Moving the state needle

State priorities - SUMMARY

Statistically Significant Reductions (2001 – 2009):

- Underage drinking (below US average)
- Underage drinking and driving (below US average)
- Underage marijuana and drug use

But not (yet) for:

- DSM-IV drug and alcohol related diagnoses
- Alcohol-related traffic fatalities

Conclusion

A disciplined, consistent approach, driven by empirical data, TA and best prevention practices appears to have significantly improved target youth consumption patterns and moved the needle for the state.

No clear evidence of impact on alcohol and drug consequences – may take time for this to become apparent.