

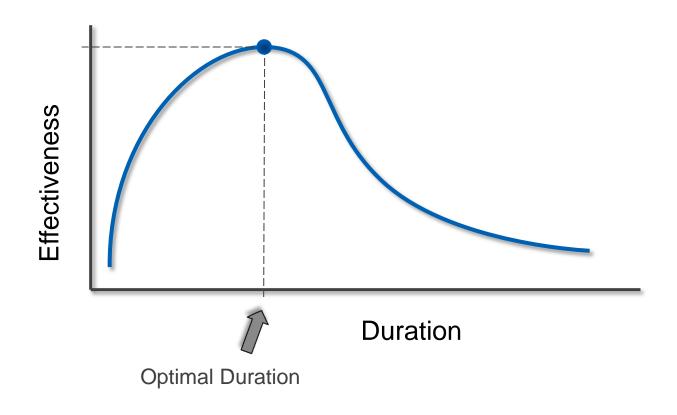
Data is Simply Data



Age = 7	Behavior = 2	Duration = 10	Behavior = 9
Duration = 4	Duration = 3	Age = 12	Duration = 2
Behavior = 1	Behavior = 8	Behavior = 7	Duration = 1
Age = 16	Age = 9	Behavior = 6	Age = 8
Duration = 2	Age = 16	Duration = 9	Behavior = 3
Age = 11	Behavior = 6	Duration = 7	Duration = 8
Behavior = 3	Duration = 4	Behavior = 4	Age = 14
Duration = 8	Age = 10	Age = 15	Behavior = 2

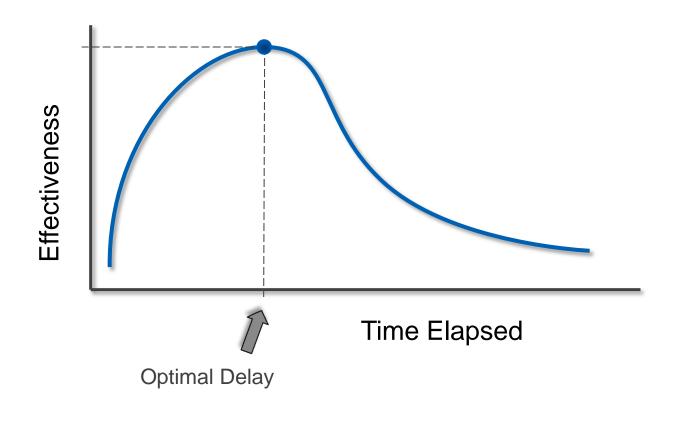


Effectiveness of Grounding Your Kids (Ages 8 to 16)





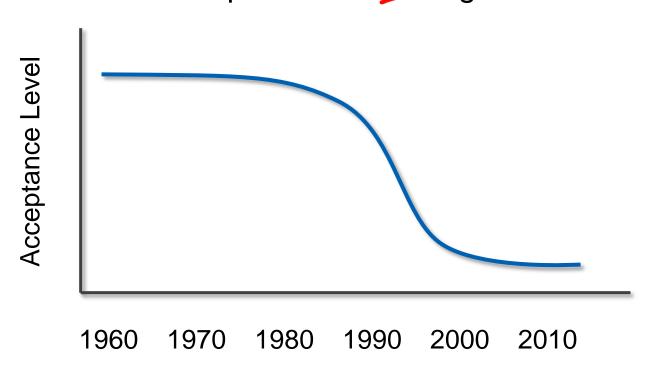
Effectiveness of Treatment "A" vs. Time Elapsed





Physically Disciplining

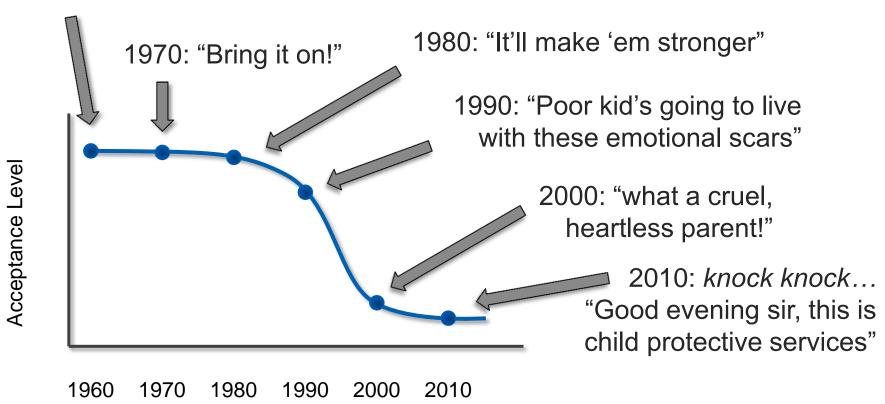
Social Acceptance of Beating Your Kids





Physically Disciplining Social Acceptance of Beating Your Kids

1960: "Instilling fear is a good thing!"





An Asset Management System provides you with the tools to transform your data into *Information*

... Present it clearly and effectively

... Permit multiple people access to it

... with an easy to use interface

... and allow them to ask the real tough questions.

Which Treatments Should I Use?



What is the best way to discipline my kids?

- Grounding
- Spanking
- Family Discussion
- Timeouts
- "The Belt"
- Silent Treatment

... and when should I use them?

Which Treatments Should I Use?



What are the best treatments for my network?

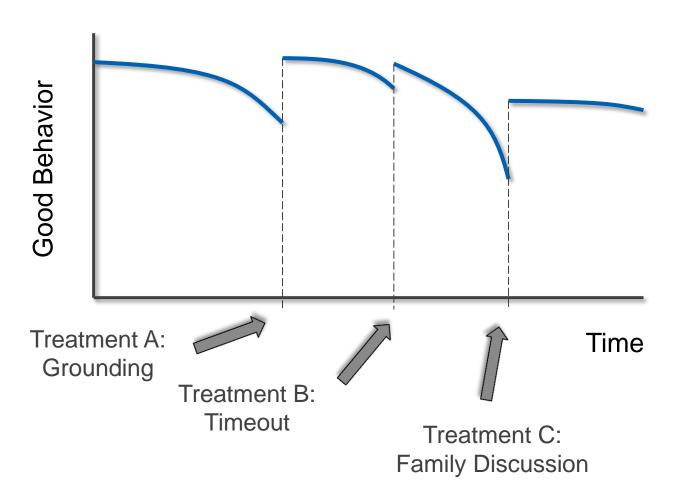
- Crack Seal
- Cold-in-Place Recycling
- Overlay
- Full Depth Reclamation
- Chip Seal
- Micro-surfacing

... and when should I use them?

Optimized Recommended Treatment Program



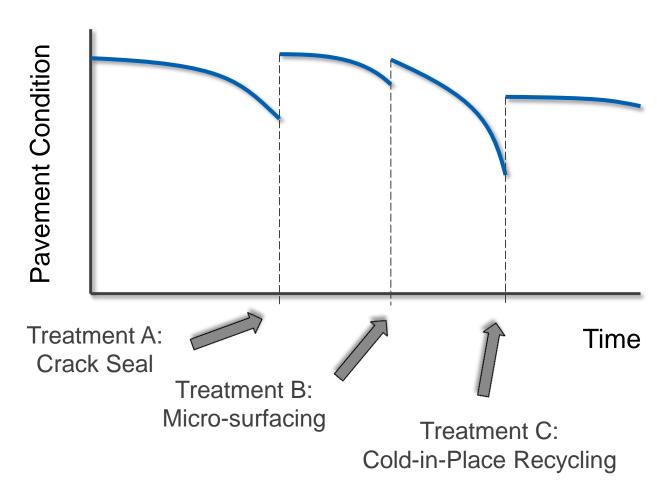
Your Kids' Behavior as a Result of Treatment



Optimized Recommended Treatment Program



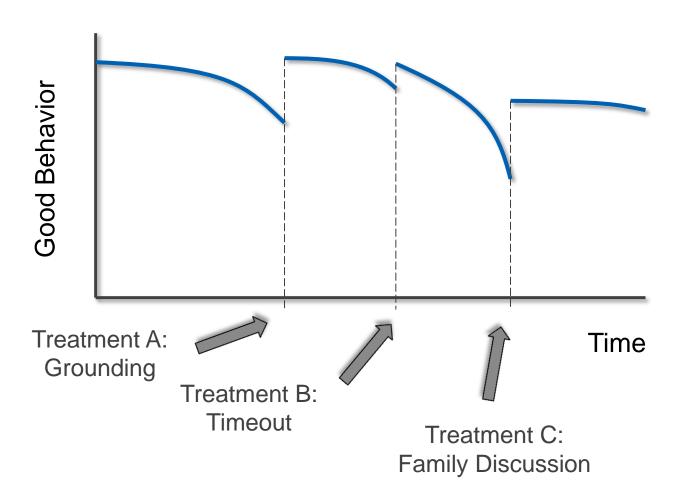
Pavement Condition as a Result of Treatment



Optimized Recommended Treatment Program

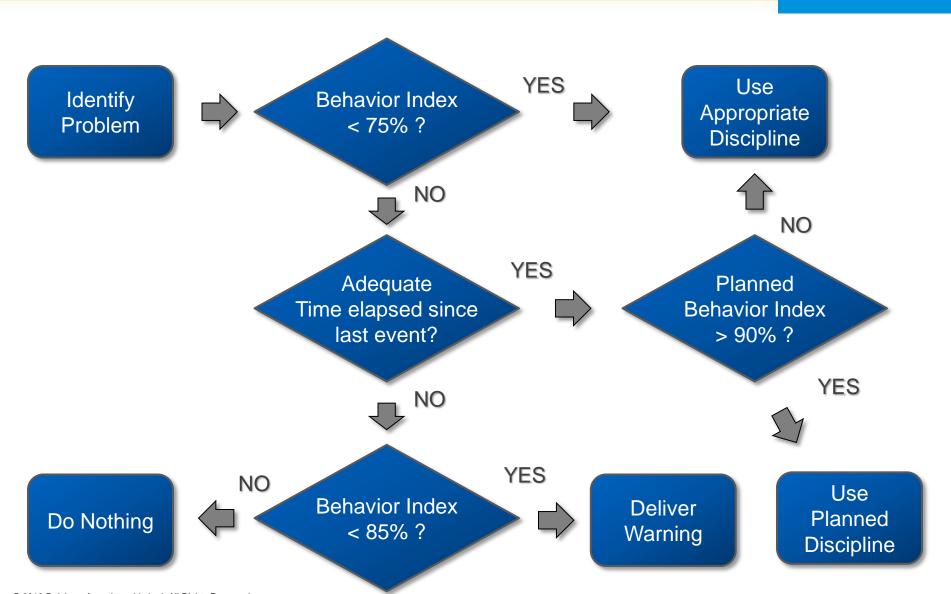


Your Kids' Behavior as a Result of Treatment



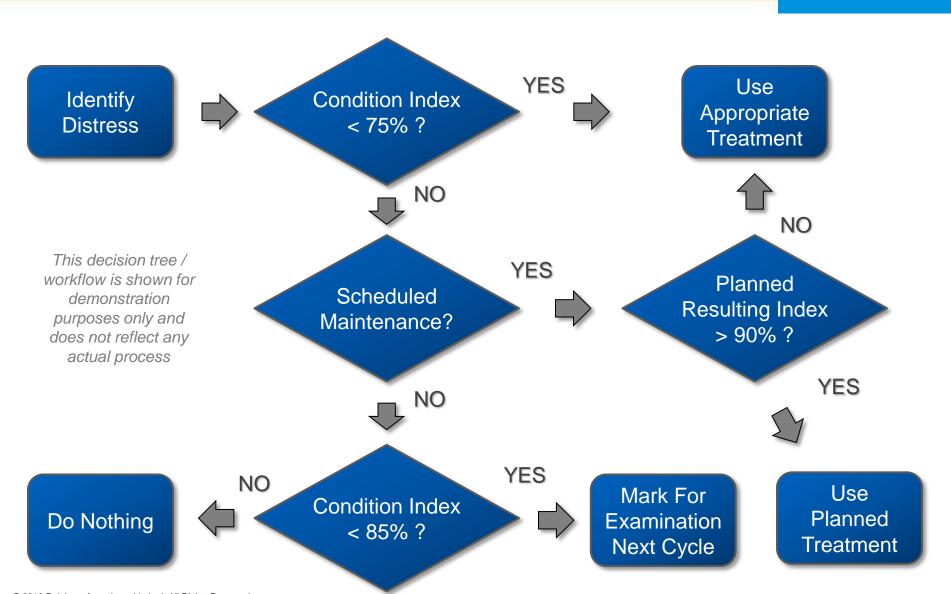
Effective Process Planning





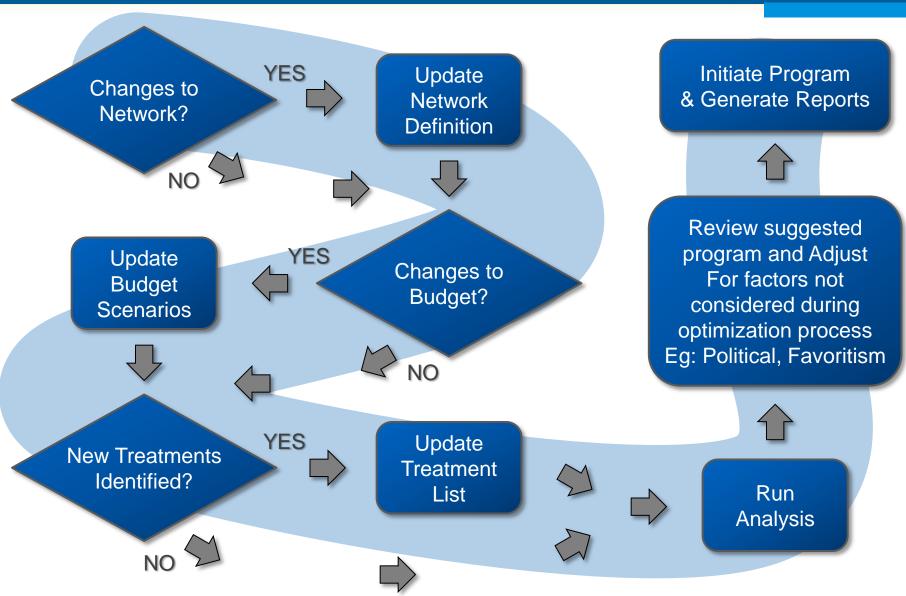
Effective Process Planning





Smooth Process Workflows





Smooth Process Workflows

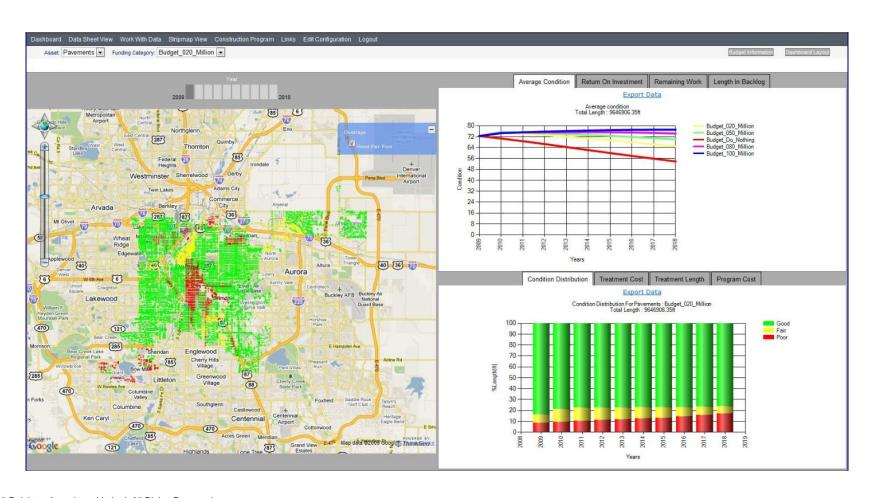




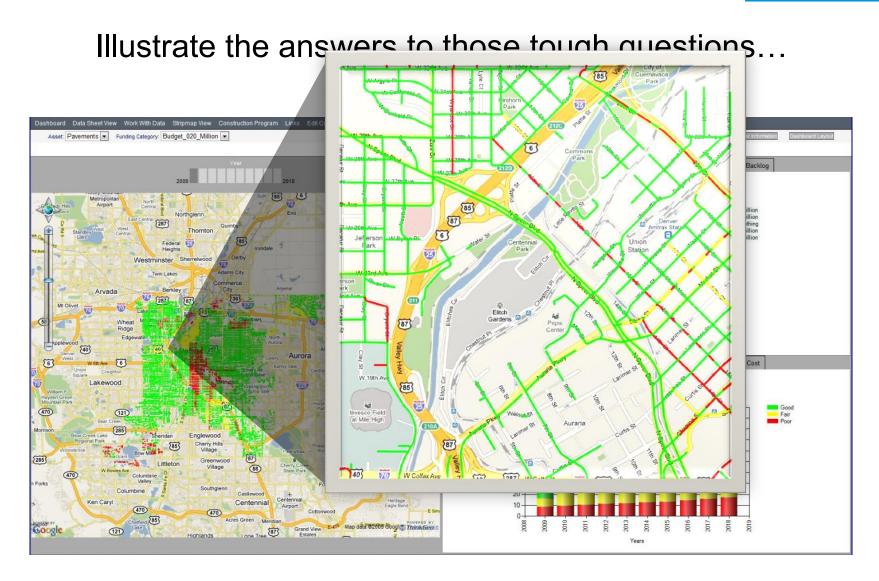
- Minimize the learning curve
- Straightforward
 Process Development
- Create ad-hoc Customizable
 Workflows



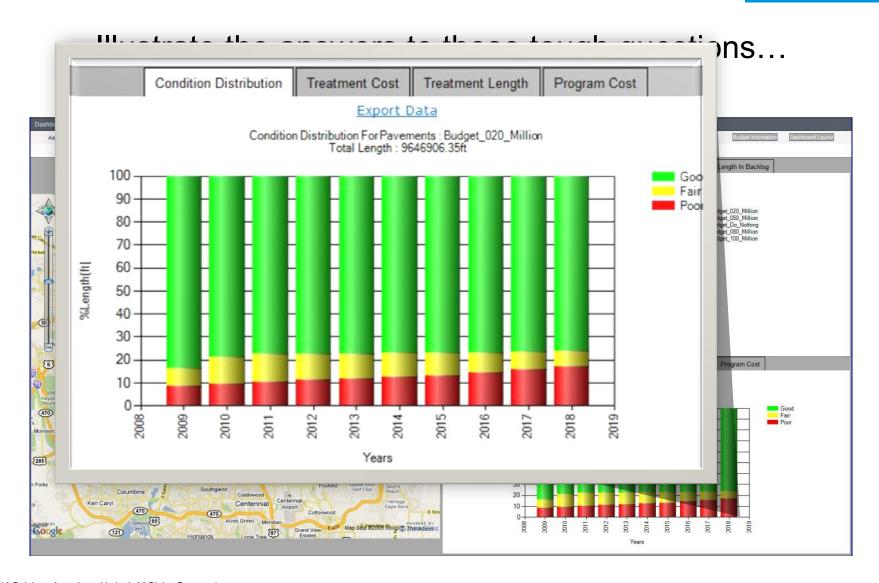
Illustrate the answers to those tough questions...





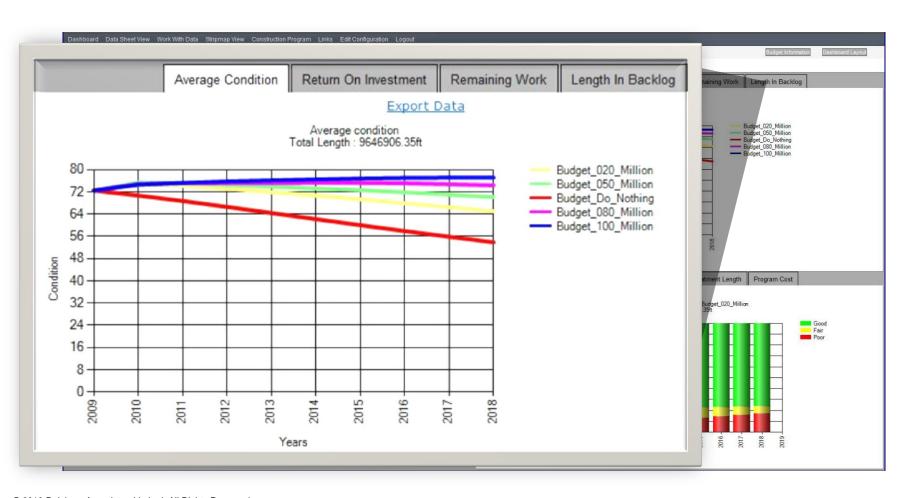








Illustrate the answers to those tough questions...





What is the best way to discipline my kids?

- Grounding
- Spanking
- Family Discussion
- Timeouts
- "The Belt"
- Silent Treatment



What is the best way to discipline my kids?

Dog?

- Grounding Scolding
- Spanking Refrain From Petting
- Family Disd\(\Omega\) is the bold Doggie Treats
- Timeouts Stare down
- "The Belt" "The Belt"
- Silent Treating earlier Them

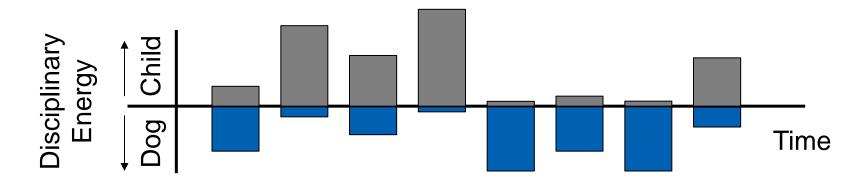
Different set of treatments... same overall goal



Different set of treatments... same overall goal

- Targets: Child's behavorial index > 80%
 - Dog's behavorial index > 70%
- Constraint: Limited Budget ... of "disciplinary energy"

cannot exceed 100%

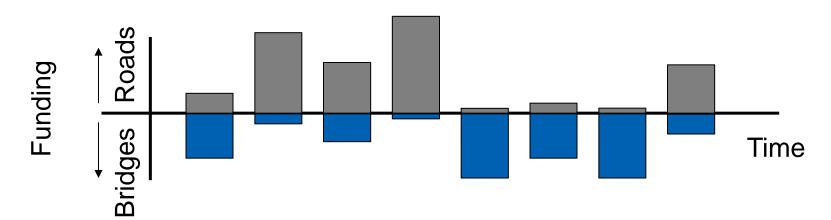




Different set of treatments... same overall goal

- Targets: Roads' Condition index > 80%
 - Bridges' Condition index > 70%
- Constraint: Limited Budget

... of "available funds" cannot exceed \$10M per year



Beyond Deterministic Models



What are the possible career choices for my kids?

- Engineer
- Doctor
- Physicist
- Sanitation Worker
- Stripper

Beyond Deterministic Models



What are the possible career choices for my kids?

- What is the likelihood they will
- Engineer choose to become an engineer?
- Doctor
- Physicist What is the risk they will make a "less than ideal" or "less
- Sanitation Worker traditional" choice?
- Stripper
 - When should I intervene to help prevent this choice from being made?

Beyond Deterministic Models



What are the possible negative effects of my selected program?

- Catastrophic Failure
- Extensive Vehicle Damage
- Environmental Harm
- Reduced Safety
- Negative Public Perception

- What is the likelihood of material failure?
- What is the risk of environmental degradation due to a particular treatment program?
- When should I intervene to help prevent these effects from occurring?



An Asset Management System provides you with the tools to transform your data into *Information*

... Present it clearly and effectively (visualization)

... Permit multiple people access to it (transparency)

... with an easy to use interface (efficiency)

... and allow them to ask the real tough questions. (even the ones you haven't thought of yet)

Thank You Arif Rafiq Deighton Associates Limited arif.rafiq@deighton.com October 20, 2010 - Rocky Mountain PPP (Boise, Idaho)