



A Comprehensive Framework for 4 E Investment Decisions NCHRP 17- 46

J. Kevin Lacy, PE
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Purpose of the Project

To advance road safety practice towards greater use of cost-effectiveness analysis so that the maximum safety improvement can be achieved for every dollar invested



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SAFETY GOALS

Our goal is to reduce fatalities, injuries and crashes and reduce the opportunity for these crashes.

Does the public really care if it is accomplished through an enforcement program, engineering, education, or emergency medical?



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Safety in MAP 21

Safety is mentioned 777 times in the current MAP 21 law. It is used in context of highway, railroad, bike, pedestrian, boat, worker, motor carrier, motorcycle, child, data, research, and several others.



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Federal Safety Funding

Funding is typically provided in several funding areas, some have flexibility others do not.

HSIP, Highway-Railroad Grade Crossing, Motor Carrier, Occupant Protection, Enforcement Programs, Data, Education, Research, etc.

All the programs have value, have common goals, but different perspectives.



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Federal Safety Funding

Not all safety items come with funding, they are eligible for funding through various programs.

Congress is encouraging (requiring) collaboration in safety programs.

A future vision may include collaborative funding, fewer funding pots, with a process to compare different projects.



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Sharing Funding?!?!?!

How do we compare the different programs, different levels of information, different everything?

The basic purpose of NCHRP 17-46 is to explore this concept and develop a frame work.



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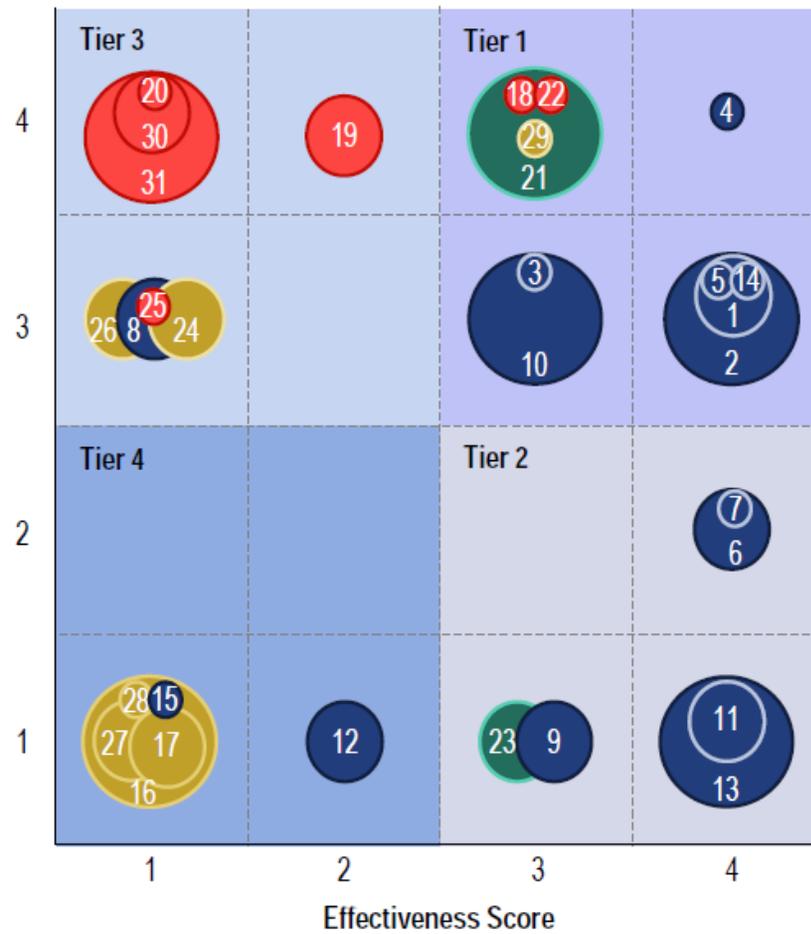
NCHRP 17-46

The project has developed a framework and NC volunteered to have its past projects from HSIP and GHSP applied for comparisons.



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Problem Score



Cost Score



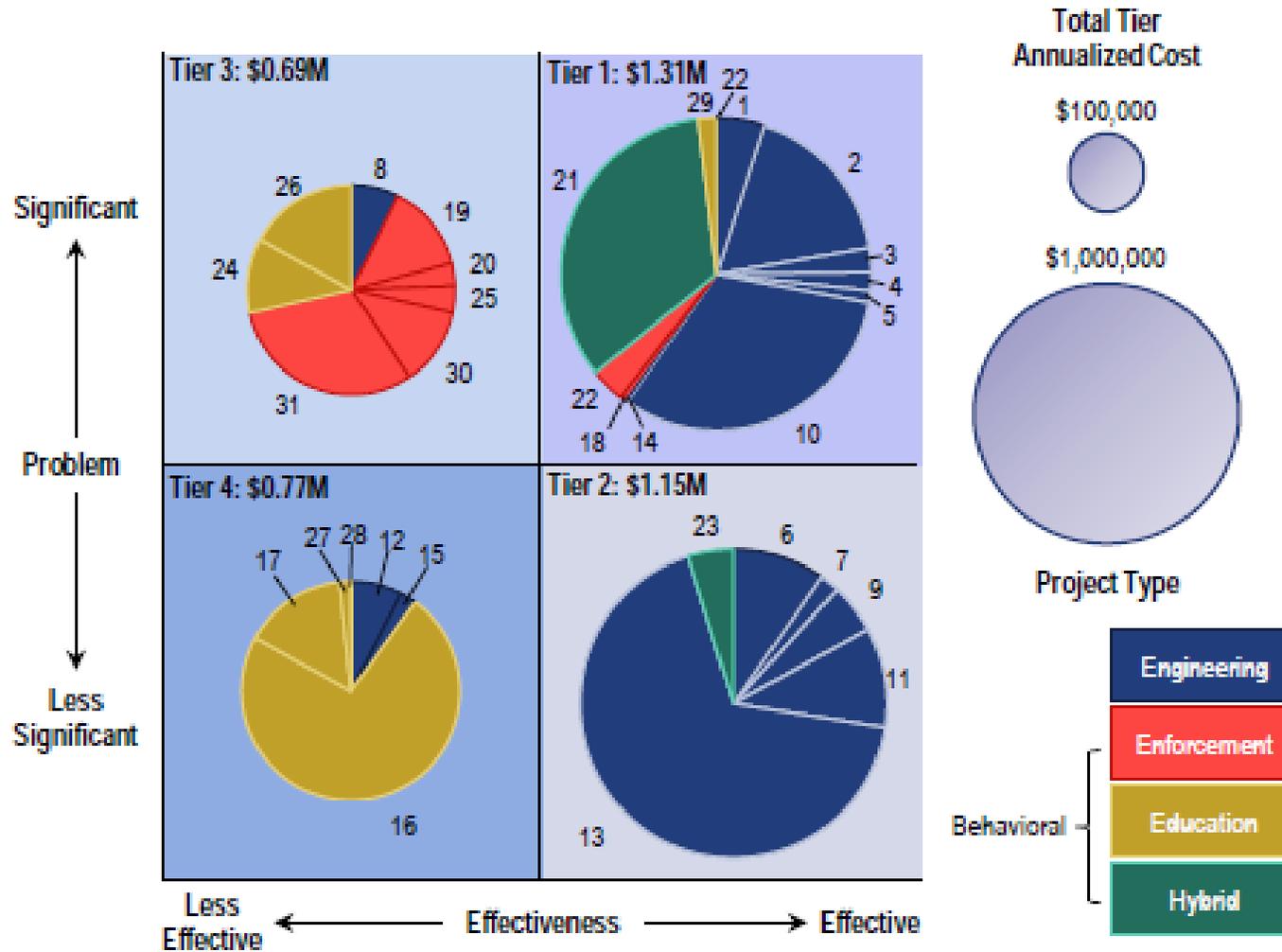
Project Type



Behavioral



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As the knowledge base improves, we can become more efficient in targeting needs.

NCHRP 17-46 provides guidance on how to compare projects across various disciplines with various states of knowledge.

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QUESTIONS?

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