



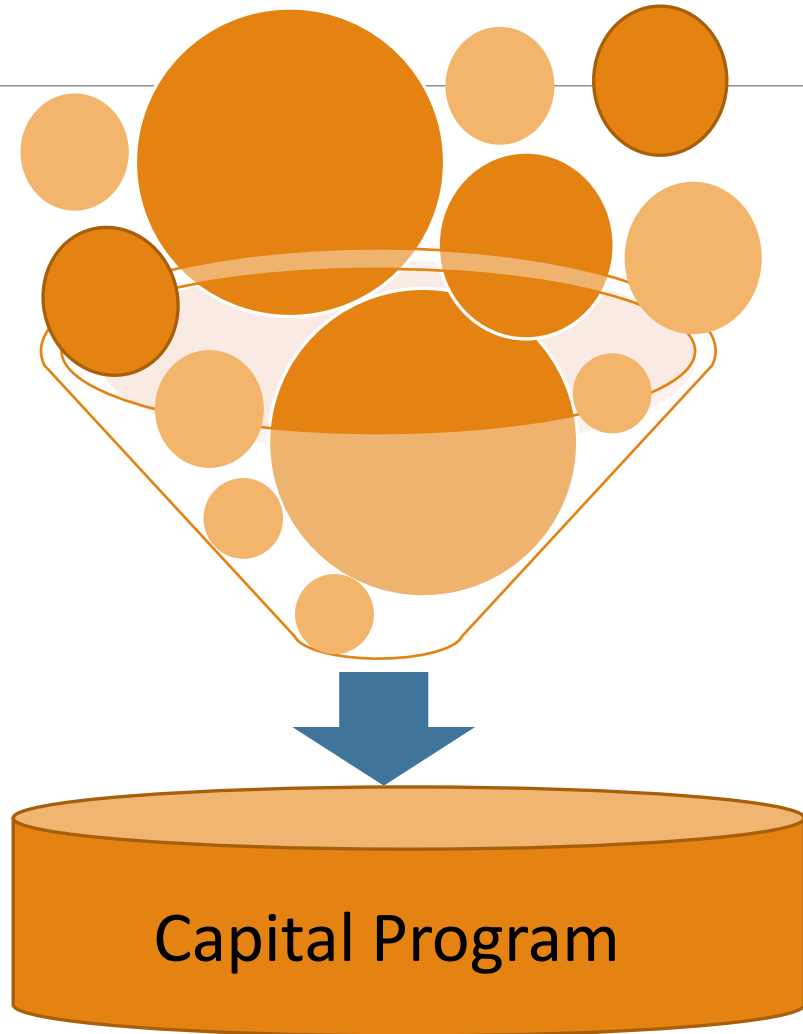
Transportation Advisory Committee

November 12, 2020

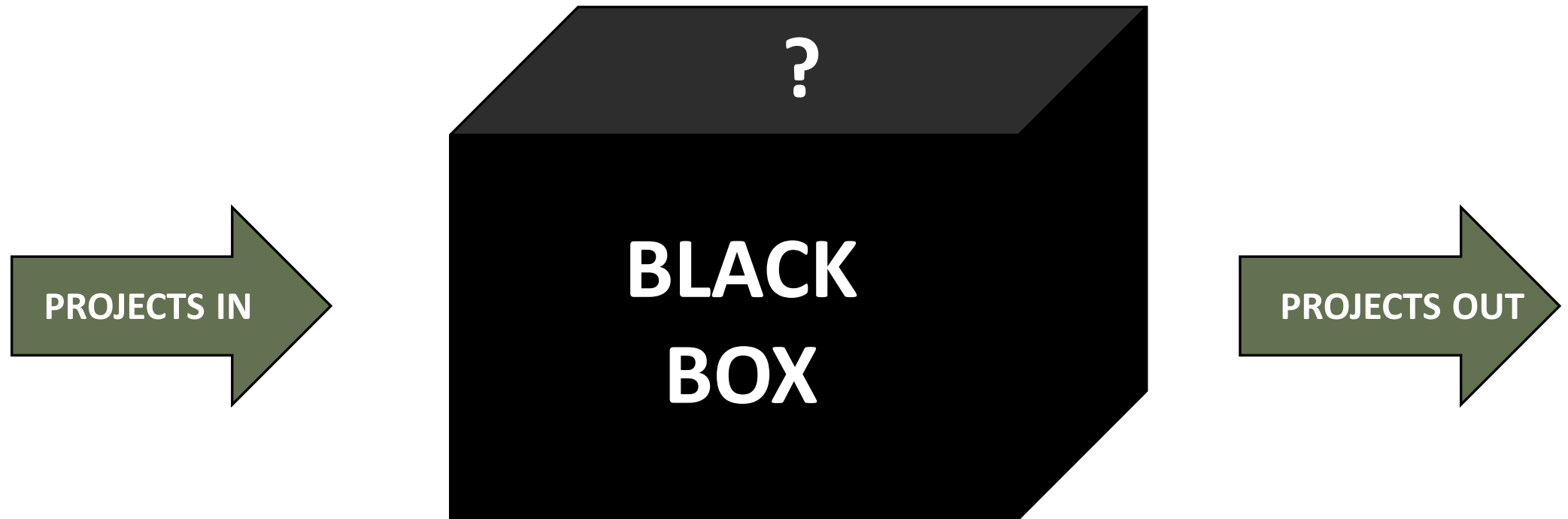
VT Transportation Project Selection and Project Prioritization

- The way it was
- The way it is now
- Where we are heading
– VPSP2 Overview

Before there was Prioritization



- The Project Delivery funnel was overflowing!
- Inconsistency in the way new projects were selected
- Unreliable project delivery times.



Current System- Highways

2007 - 2019

Pavement Programs		Bridge Programs		Roadway Program		Traffic and Safety Program	
Regional Priority	20	Regional Priority	15	Regional Priority	20	Regional Priority	20
Pavement Condition Index	20	Bridge Condition	30	Hwy Sufficiency Rating	40	Intersection Capacity (LOS)	40
Benefit-Cost	60	Remaining Life	10	Cost per Vehicle Mile	20	Crash Rate	20
		Functionality	5	Project Momentum	20	Cost per Intersection Traffic Volume (AADT)	20
		Load Capacity and Use	15			Project Momentum	10
		Waterway Adequacy & Scour Susceptibility	10				
		Project Momentum	5				
		Asset-Benefit Cost	10				
Total	100		100		100		110

Current Regional Prioritization

CRITERIA

FY 2022 TRORC Project Prioritization -- FEBRUARY 10, 2020

TRORC Rank	Town	Location	Project #	VTrans Project Division	Description	Status as of 2020	Pres 30 20	Saf 30 25 15	Multi Enrgy 10 5 3	Eco 10 5 3	Soc Cul 5 3	Alt 5 3	Flood Vol./ Haz Mit/ Misc. 5 3	TOTAL
1	Hartford	US5/Sykes, Sykes/Ralph Lehman	STP 0113(59)S	Traffic & Safety	install roundabouts	FOB -> Spring 2020	20	30	10	5	5			75
2	Hartford	BR61/Guechee Gorge bridge	NH 020-2(45)	State Highway Bridges	bridge rehabilitation (bracings and gussets)	FOB -> Spring 2021	30	30	5	5	5			75
3	Killington-Stockbridge	VT100 (US4 to VT107)	ER STP 022-1(25)	Paving	lane roadway design	FOB -> Summer 2021	30	30	5		5			70
4	Newbury	BR15/Boltonville Rd over Wells River	BO 1447(32)	Town Highway Bridges	bridge rehab, including replace existing deck and steel beams and minor concrete substructure repair, and	FOB -> 2021	30	30			5	5		70
5	Groton-Newbury	US302 (Groton to Newbury)	STP P319(2)	Paving	resurfacing	FOB -> Summer 2021	30	30			5			65
6	Chelsea-Vershire	VT113 (from VT110 to 7 miles east)	STP 2955(1)	Paving	resurfacing	FOB -> 2021	30	30			5			65
7	Norwich-Hanover	VT10A bridge to Hanover, NH over Connecticut River	BF A004(800)	State Highway Bridges	Rehabilitat joint	FOB -> 2022	30	25		5	5			65
8	Hartford	BR7/VA Cutoff Rd over White River	BO 1444(60)	Town Highway Bridges	bridge repl	FOB -> 2022	20	30	5	5		5		65
9	Brookfield	VT12 mm 3.87	STP 0241(49)	Roadway	rock slope	FOB -> 2022	30	30						60
10	Braintree	BR47/VT12	BF 0241(51)	State Highway Bridges	partial superstructure replacement	D&E -> 2022	30	30						60
11	TheHford	culvert ID#45896 on I-91	IM SCRP(22)	Roadway	Rehab of culvert#45896 on I-91 ETE MM 82.2	FOB -> 2020	30	25			5			60
12	TheHford	BR24/VT113	STP CULV(48)	Roadway	replace 48" CGMP	FOB -> 2021	20	25			5			50
13	Plymouth	BR107/VT100	STP DECK(52)	State Highway Bridges	deck replacement	D&E	20	25			5			50
14	Woodstock	US4, MM 7.724	NH SCRP(16)	Roadway	Culvert rehabilitation	FOB	30	25						55
15	Hartford	US5 in Hartford from ETE mm 73.15 to ETE 75.3	HES 0113(77)	Traffic & Safety	scoping safety issues	Candidate	20	25		5				50
16	Stockbridge	BR35/Brigade St	BO 1444(61)	Town Highway Bridges	scoping alternatives	D&E	30	15			3			48
17	Bradford	BR22/Creamery Rd over Waits River	BO 1447(33)	Town Highway Bridges	Deck replacement	FOB	20	25		3				48
18	Bethel	retaining wall VT107 mm 3.33 and 1.38	STP WALL(4)	Roadway	evaluation, remediation and acquisition of ROW		30	15						45
19	Woodstock	BR1/Pomfret Rd over Gulf Stream	BF 0166()	Town Highway Bridges	scoping alternatives	Candidate	20	15						35
20	Norwich	BR41/Turnpike Rd over Bloody Brook	BO 1444()	Town Highway Bridges	scoping alternatives	Candidate	20	15	3					38
21	Topsham	BR23/VT25 over Waits River	BF 031-1(13)	State Highway Bridges	scoping alternatives	D&E	20	15			3			38
22	Tunbridge	BR35/Bicknell Hill Rd	BRO 1444()	Town Highway Bridges	temp bridge construction	Candidate	20	15			3			38
NR	Norwich	I-91 BR48 N&S	IM 091-2(89)	Interstate Bridges	bridge rehabilitation	D&E -> 2023								
NR	Plymouth	BR115/VT100	BF 013-3(13)	State Highway Bridges	bridge rehabilitation	FOB -> 8/16/21-10/1/21 closure								
NR	TheHford-Lyme	BR33/VT113 over Conn. River	T&D	State Highway Bridges	NH is lead agency	FOB -> 2022								
	new	No Rank												

SCHEDULED
PROJECT
TIMELINE

TOTAL
SCORE

Current System – Grant Programs

2007 - 2019

Bike and
Pedestrian
Facilities

Transportation
Alternatives
Program

Better Roads

Municipal
Mitigation
Grants

Town Highway
Structures

Class 2 Town
Highways

TH Federal
Disasters

TH Non-Fed
Disasters



Vision

Develop a performance-based, data driven project selection & prioritization framework that maximizes the “**transportation value**” delivered to Vermont taxpayers.

VPSP2 Goals

Identify and define how regional ideas for transportation improvements can become transportation projects.

Develop a fair, consistent, reliable, and standardized project selection and prioritization framework for use by all RPCs.

Revise current processes to increase transparency, provide “best value” while communicating the “transportation” value to our customers.

Develop processes and tools that guide the Agency towards holistic corridor management and planning.

Identify a process that allows VTrans to remove candidate projects without legislative approval.

Incorporate health and resiliency into VTrans’ project prioritization processes.





Customer Engagement



- Held 4 Stakeholder Workshops to assess current process and develop evaluation criteria.

Cross Section of Workshop Participants

- Regional Planning Commissions (RPCs)
- Sister Agencies: VDH, ANR, ACCD, VEM
- Special Interests: VLCT, VCIL, AARP, AAA,
- Modal Interests: Rail Councils, Rail Operators, Bike / Ped Interest Groups, Transit Providers, VT Truck and Bus Association
- VTrans



FIVE MODES



VPSP2 CRITERIA

SAFETY

Max points = 20

ASSET

CONDITION

Max points = 20

**MOBILITY /
CONNECTIVITY**
Max points = 15

COMMUNITY
Max points = 10

**ECONOMIC
ACCESS**
Max points = 10

ENVIRONMENT
Max points = 10

RESILIENCY
Max points = 10

HEALTH ACCESS
Max points = 5



VPSP2 - 8 Evaluation Criteria



- **Safety:** reducing the risk of crashes of any type and user.
 - *Roadway and Intersection crashes, curve reduction factors*
- **Asset Condition:** maintaining multimodal infrastructure to preserve its current condition, by rehabilitating it to improve the condition and extend service life, and/or replacing it to improve its condition and service.
 - *Customer service level, new asset/capacity, optimal treatment time*
- **Mobility & Connectivity:** increasing the reliable connectivity to jobs and other destinations and/or increasing the number of mode choices available for people and goods.
 - *Connectivity to bicyclists, pedestrians, public transit and multi-modal facilities*



VPSP2 - 8 Evaluation Criteria



- **Economic Access:** increasing the ability of a region to attract and retain businesses and the workforce by providing better access to jobs.
 - *Project Impact Map depicts the number of employed individuals potentially impacted by upcoming projects within ½, 1, and 2 mile vicinities.*
- **Resiliency:** minimizing the impacts of planned and unplanned events (e.g., work zones, floods and extreme weather).
 - *Uses the Transportation Resilience Planning Tool (TRPT) to determine a project's resilience score (combo of vulnerability and criticality scores)*
- **Community:** conforming to the goals and objectives defined in local and regional plans, and supporting the outcomes of a robust public process.
 - *Identified in any local or regional planning document, town/Selectboard support, impacts to surround community facilities (schools, library, town offices, churches)*



VPSP2 - 8 Evaluation Criteria



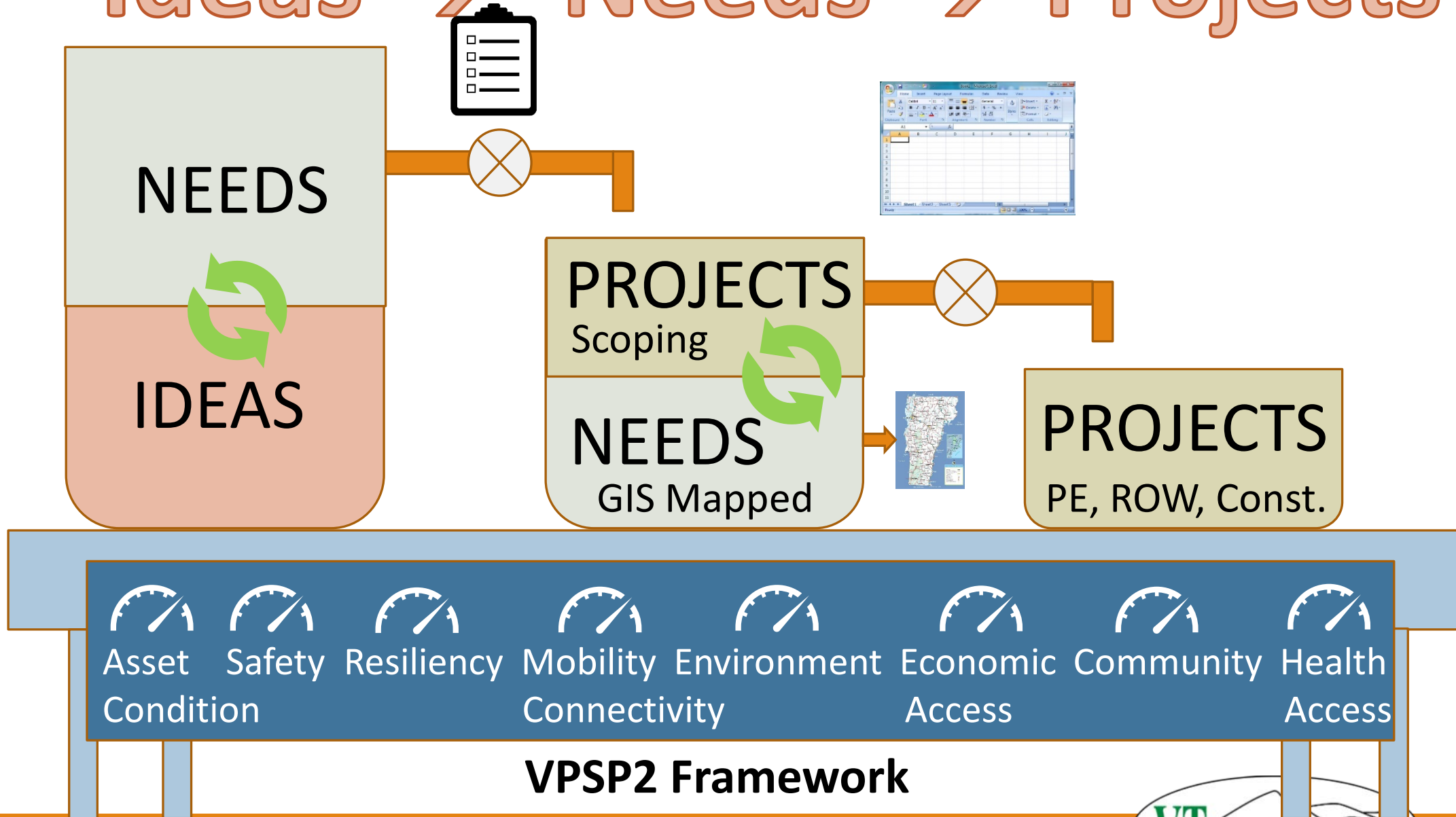
- **Environment:** reducing the negative impacts of travel (e.g., reducing greenhouse gas [GHG] emissions, improving air quality, enhancing safe wildlife passage, and/or improving water quality).
 - *Impacts to wildlife, air quality, water quality, cultural resources (look at required vs. voluntary mitigation in project scope).*
- **Health Access:** increasing the opportunity for physical activity and increases access to destinations that improve health (i.e., healthcare, education, and healthy food).
 - *Access to health care/physical activity facilities (senior centers, parks, community gyms), healthy food destinations (grocery store, food shelf, school lunch programs), improved opportunity for physical activity (connect to existing sidewalk networks or links to facilities)*

How Projects Get on the Capital Program



- Asset Driven – Remains the same
- Safety Driven – Remains the same
- Grant Opportunities – Remains the same
- Regionally Identified -- *New*
- Harmonization – *New, formalized*

Ideas → Needs → Projects



Qualifications Worksheet

To address regionally identified ideas and needs, a Qualifications Worksheet was developed to assess the scope and evaluate it's potential Transportation Value.

See Qualifications Worksheet

Harmonization

“incorporation of need(s) that would not have otherwise been included in the project.”

(e.g. a paving project is coming through and drainage culverts are in need of replacement. Like Howe Hill Rd in Pomfret-Sharon

Or when VT107 was getting resurfaced after T.S. Irene, the VT100/VT107 intersection was improved along with the creation of a park and ride).

Consideration to be included in project scope is key...how much scope creep, financial addition, ROW impacts, natural project inclusion needs to be balanced.

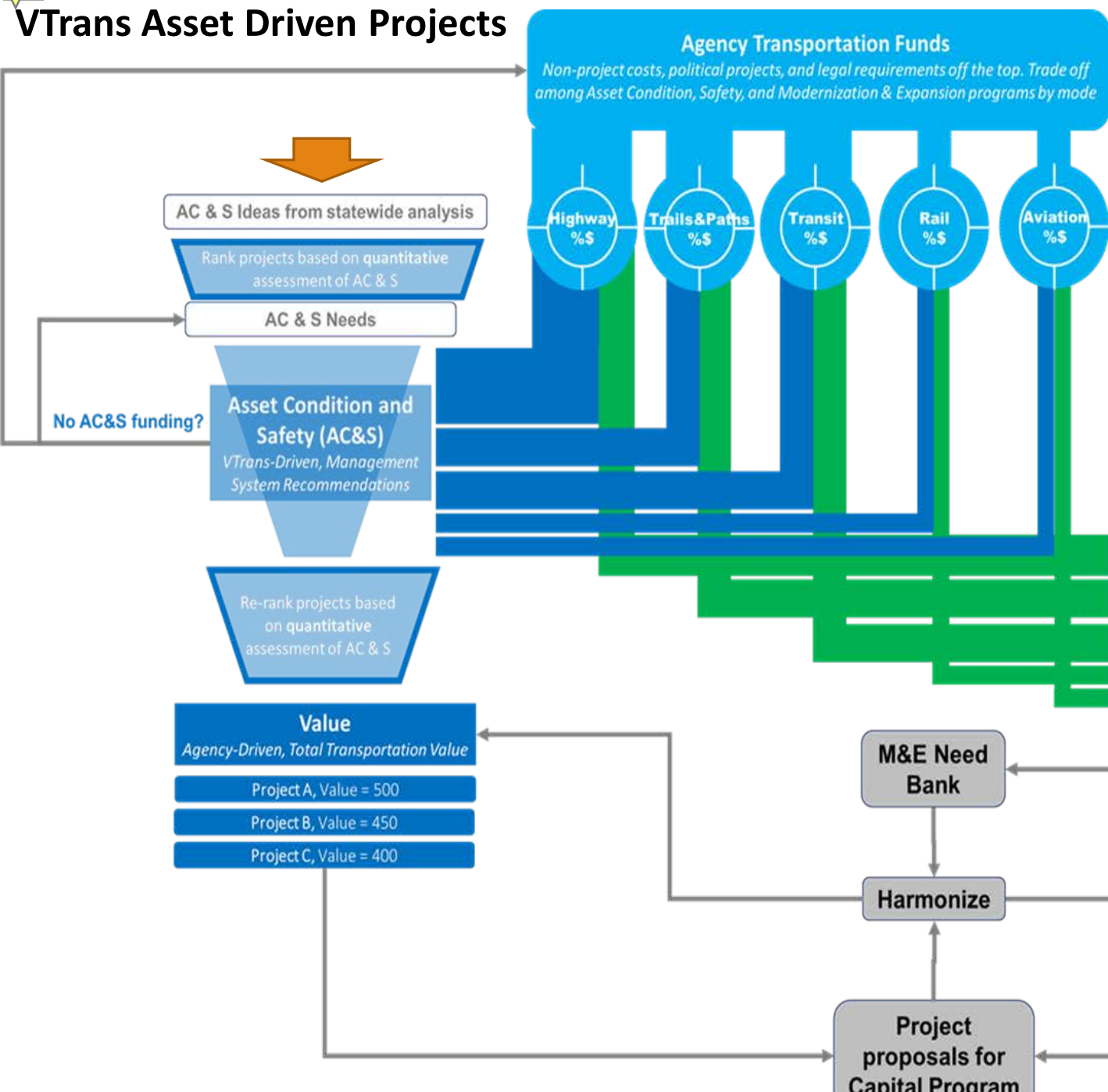
What to Expect for February 2021?

1. VTrans will send a list of projects derived from Asset and Safety Management system for TACs to review, evaluate and prioritize.
2. 2021 will review only Paving, Roadway and Traffic & Safety projects. 2022 will review State and TH Bridge projects.
3. RPCs will work with TAC to generate a “Transportation Value” for each project.
4. TAC and TRORC Board approve of list to submit to VTrans by Spring 2021.

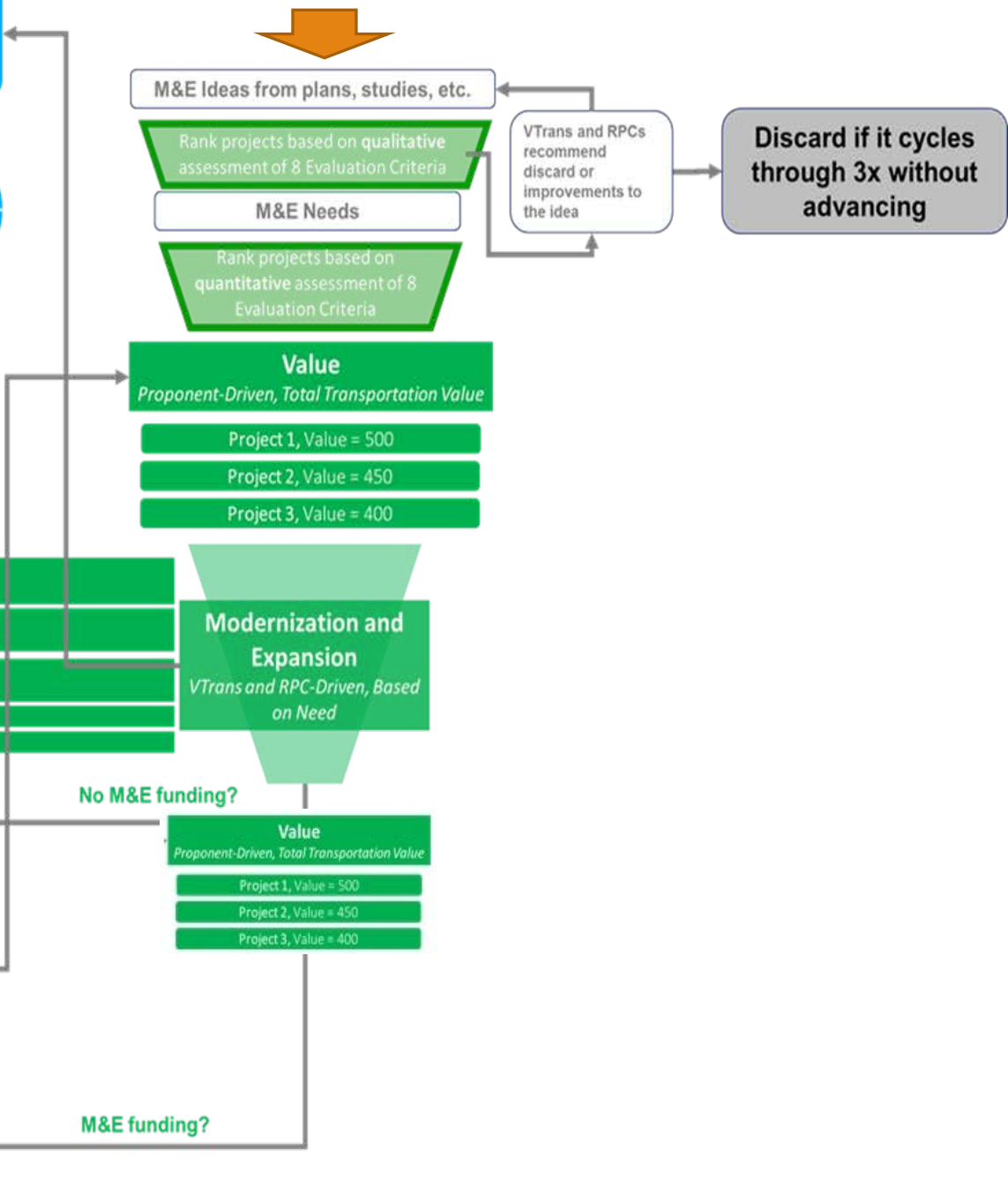
Questions?



VTrans Asset Driven Projects



Modernization & Expansion Projects



VPSP2 Process

VTrans Asset Driven Projects	Modernization & Expansion Projects
VTrans Budget Committee determines spending levels for the various transportation programs	Ideas will be generated primarily from plans and studies but also from public input and TACs
VTrans asset management systems perform data driven analysis to assist in developing potential projects to meet state and federal goals.	Ideas will be submitted to RPCs and RPCs will determine which ideas may provide the most transportation benefit to the region. CCRPC will rank projects using the VPSP2 Qualification Sheet
VTrans will provide lists of projects totaling 150% of available funding for each program to the RPCs	A feasibility analysis and initial cost estimate will be developed by the RPC or the project sponsor
RPCs will rank the projects. The RPC rank will make up 20% of the total project score	RPCs will use the VPSP2 Qualification Sheet to calculate the initial transportation value of each potential project
Projects will be ranked with 80% VTrans score and 20% RPC score	Potential projects will be geolocated and submitted to VTrans. Geolocated projects may be considered for harmonization with other projects being developed
Transportation Value will be calculated but will not be used to select projects	VTrans will aggregate the lists from each RPC into a statewide list. This list will be prioritized according to Transportation Value RPC
	High value projects will be added to the Capital Program as funding becomes available