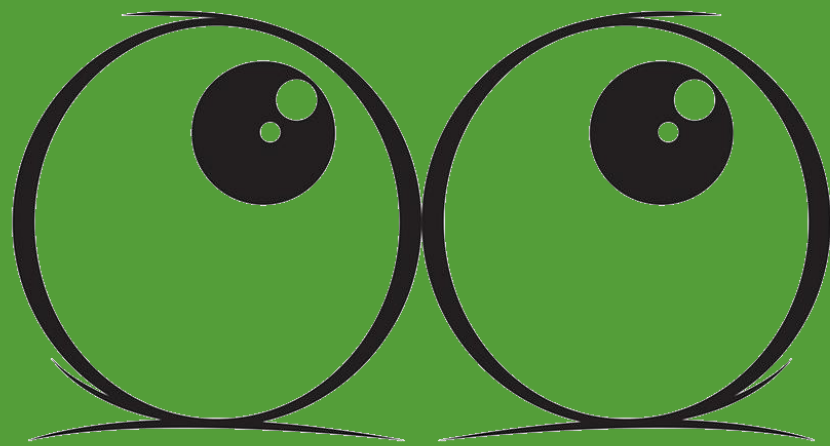


TTP PROJECT PRIORITIZATION

An Innovative Look



WHY?

Why you have to have it. . .

25 CFR § 170.402 – “All Tribes must prepare a TTIP or Tribal priority list.”

25 CFR § 170.403 – “...the fund source and use must be clearly identified on a FHWA-approved TTPTIP.”

25 CFR § 170.404 – “...may be used on eligible projects or activities provided that they are identified on a FHWA-approved TTPTIP.”

25 CFR § 170.420 – “The Tribal priority list is a list of all transportation projects that the Tribe wants funded.”



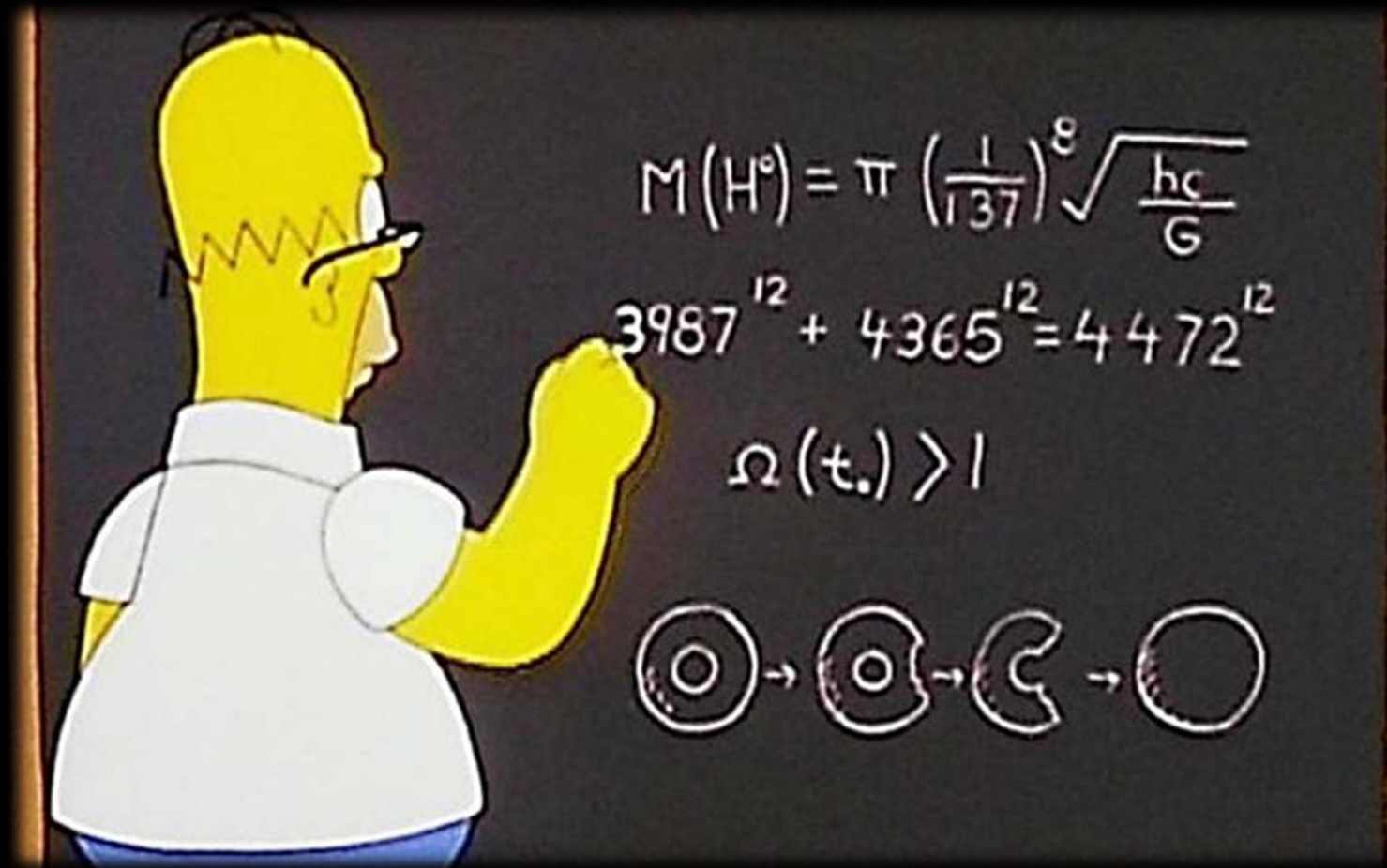
Why you should have it. . .

- 1) A clearly defined priority list assists Tribe's in reducing over-programming and reflects a clear-cut plan for construction in the coming years.
- 2) Allows Tribal leaders to see just how far down the list their limited dollars would go, and what additional projects could be funded if additional dollars became available.
- 3) Provides data towards evaluating the needs for and benefits of upcoming projects as they compare to each other.



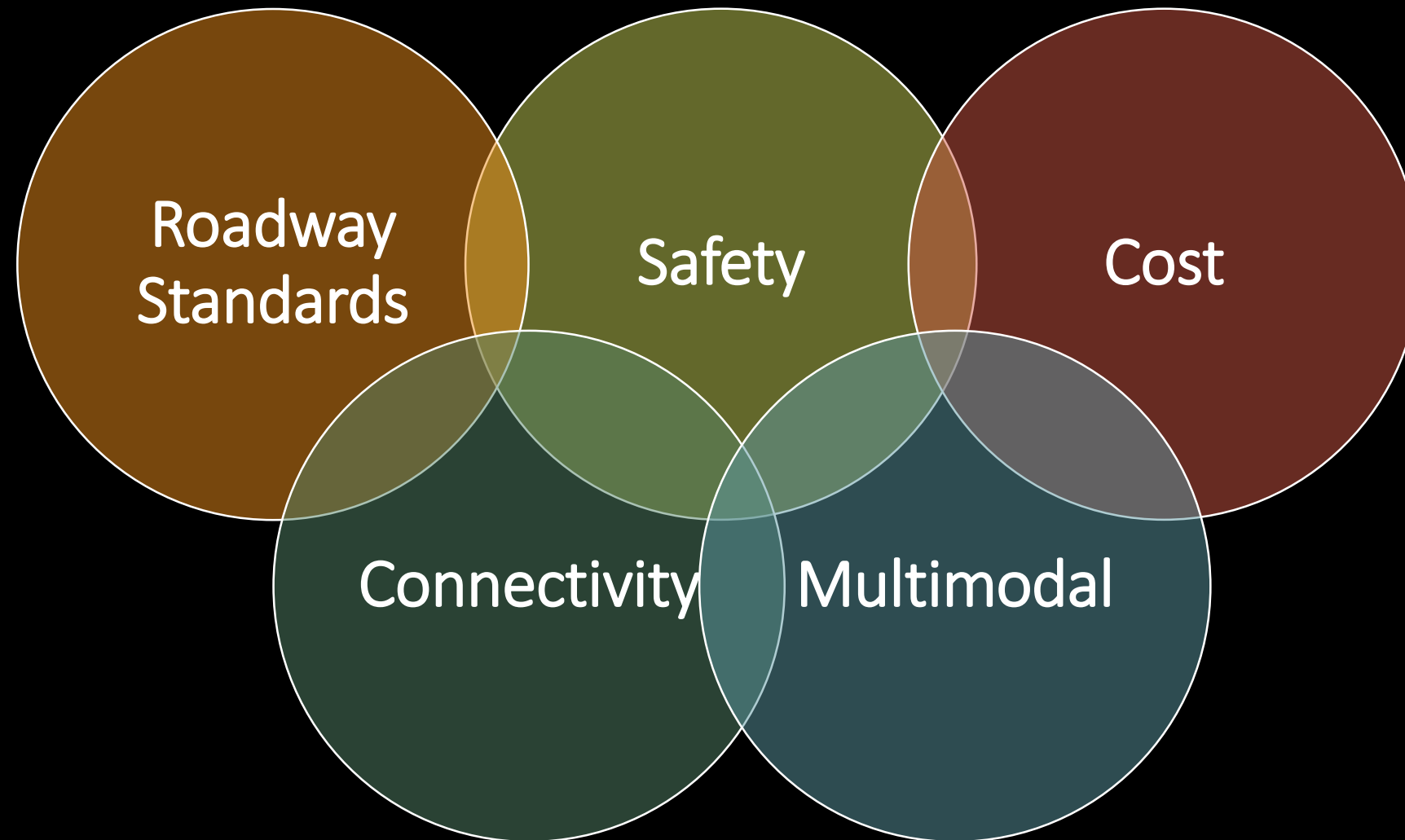


It's all about the Data!





Factors to consider when assessing your priorities



Where to find your data

TTP Routes Needing Improvement								
Route Number	Section Number	Road Name	Surface Type	Width (ft)	Surface Rating	Surface Desc.	Roadbed Condition	Drainage Condition
5001	10	KAYAK LAUNCH 1 ACCESS ROAD	Primitive	10			Primitive Trail	Unimproved Road
5001	20	WILLS WORK ROAD	Primitive	12			Primitive Trail	Unimproved Road
5002	20	BEACH ACCESS ROAD	Bituminous < 2"	16	66	Fair	Designed, but Needs Improvement	Occasional Drainage Prob.
5003	10	SIPPS ROAD	Bituminous < 2"	22	62	Fair	Designed, but Needs Improvement	Occasional Drainage Prob.
5004	10	TIDE RUN	Bituminous < 2"	20	68	Fair	Designed, but Needs Improvement	Occasional Drainage Prob.
5004	20	WATERLINE DRIVE SOUTH	Bituminous < 2"	18	68	Fair	Designed, but Needs Improvement	Occasional Drainage Prob.
5004	30	MZZENMAST DRIVE	Bituminous < 2"	20	68	Fair	Designed, but Needs Improvement	Occasional Drainage Prob.
5006	40	ALMA ROAD	Bituminous < 2"	16	80	Good		
5006	50	UNCLE PERCY'S ROAD	Bituminous < 2"	18	72	Fair		
5007	10	DANIELS ISLAND ROAD	Primitive	10				

Surface Condition Index (SCI) Report		
Route Number	5042	Section Number 30
Road Name	CULTURAL CENTER ACCESS	
Observation Date	10/31/2018	
Asphalt Rating Item	Asphalt Rating Description	Asphalt Rating
1. Longitudinal Cracking Factor	Moderate, Cracks more than 1/4 inch wide	3
2. Transverse Cracking Factor	Slight, Cracks barely visible	4
3. Alligator Cracking Factor	Moderate, Cracks more than 1/8 inch wide	3
4. Grade Depression Factor	Moderate, Depression 2 inches or greater	2
5. Upheaval Factor	Slight, Humps less than 1/2 inch	4
6. Rutting Factor	Moderate, Depression 1/2 to 1 inch	3
7. Corrugation Factor	Slight, Few ripples are visible	4
	Moderate, Loose aggregate covers < 1/2 road surface	3
	Moderate, Liquid asphalt covers < 1/2 road surface	3
	Moderate, Patching significantly deteriorated	2
Asphalt SCI		62

Roadway Inventory Data Entry

Route Code (XXXX-XXX)	5032-010	31a Road/Bridge Name	POWWOW LOOP ROAD	01 Area	S Eastern Region
Agency Code	50	03 Reservation	035 Mashpee Wampanoag	04 Route Number	5032
		05 Section Number	10		
Roadway Data					
Pavement Data					
07 State	25 Massachusetts	32 County	001 Barnstable County		
08 Ownership	1 BIA	33 Congressional District	09		
09 Federal Aid Category	1 Local Roads (Other)	34 Owner Route Number	5032		
10 Class	5 Rural Local	35 Drainage Condition	3 Drainage		
11 Terrain	1 Flat	36 Shoulder Condition	3 Excellent		
Construction Need	1 BIA Construction Need	37 Num of Railroad Crossings	0		
Surface Type	5 Bituminous > 2"	38 Railroad Crossing Type			
Shoulder Type	3 Paved Shoulder	39 Right of Way Utility	3 Both		
Section Length (mi)	0.2	40 Right of Way Cost (\$1000/mi)			
Surface Width (ft)	18	41 Begin Latitude	41.5950		
Shoulder Width (ft)	2	42 End Latitude	41.5940		
Bridge Number		43 Begin Longitude	-70.4766		
Bridge Condition		44 End Longitude	-70.4751		
Bridge Length (ft)		45 Atlas Map Number			
Roadbed Condition	5 Good, No Curbs	46 Grade Deficiencies	7 None		
Level of Maintenance	4 Optimum - 90-100%	47 Sight Deficiencies	5 90-100%		
Snow and Ice Control	5 Effort = 5	48 Num of Curve Deficiencies	0		
Right of Way Status	3 Easmt. Acq. And Rec.	49 Num of Stopping Restrict.	0		
Right of Way Width (ft)	30	50 Safety Study	0 No Study		
Additional Incidental %		51 Road Category	A General		

Reviewed	Directed To Official	Remarks	TTAM Data
Core			
5 - Section Number [999]	10		
7 - State	25 Massachusetts		
8 - Ownership	5 County And Township		
9 - Federal Aid Category	1 Local Roads (Other)		
10 - Class	4 Rural Major Collector		
11 - Terrain	2 Rolling		
12 - Construction Need	2 Construction Need Of Other		
Road			
13 - Surface Type	5 Bituminous > 2"		
14 - Shoulder Type	3 Paved Shoulder		
15 - Length of Section (mi) [999.9]	1.7		
16 - Surface Width (ft) [999]	20		
17 - Shoulder Width (ft) (Enter 0 for none) [99]	2		
Traffic			
21 - ADT Year [9999]	2016		
22 - Existing ADT [9999999.9]	9,870.1		
23 - Percent Trucks [99]	7%		
Default ADT	50		

Length [mi]	1.7	GPRA Rate [\$1000/mi]	\$153.30	Eligible Percent [%]	75%	(1) Adj. Rate [\$1000/mi]	\$114.97	(2) Road CTC [\$1000]	\$195.45
Incidental			\$153.30				\$114.97		\$195.45
Grade & Drain			\$235.23		100%		\$235.23		\$399.89
Aggregate			\$132.84		0%		\$0.00		\$0.00
Pavement			\$196.61		100%		\$196.61		\$334.24
Additional Incidental							\$0.00		\$0.00
Length [ft]		GPRA Rate [\$/ft]		Eligible Percent [%]		(3) Adj. Rate [\$/ft]		(4) Bridge CTC [\$1000]	
Bridge									
						(5) Raw CTC [\$1000]	\$929.6		
						RNDF Share [%]	100.00%		
						(6) RNDF CTC [\$1000]	\$929.6		
(1) GPRA Base Rate X Eligible Percent									
(2) Adjusted Road Rate X Length									
(3) Bridge Rate X Eligible Percent									
(4) Adjusted Bridge Rate X Length / 1000									
(5) Incidental CTC + Grade & Drain CTC + Aggregate CTC + Pavement CTC + Addnl. Incid. CTC + Bridge CTC									
(6) Raw CTC X RNDF Share									
(7) Actual ADT X Section Length X RNDF Share									

Update Year	2018
Future Surface Type	P
Geo-Political Region Number	54
Adequate Design Standard	11
Future ADT	14,657
(7) VMT	16,779
Calculation Note	
CTI complete. No VMT adj. No CTI adj. existing non-trail. eligible road. rd share=100%. run=2010.11.	



Safety Data

- *Road Safety Audit Locations.* Points are given to projects identified in the RSA/Safety Plan.
- *Risk Grade.* During the RSA/Safety Plan process, each recommended project is given a Risk Grade (A is lowest risk and F is highest risk). Projects with greater risk are assessed more points.

Roadway Standards Data

- *Roadway Width*. Roadways that do not meet minimum width standard receive additional points.
- *Surface Condition Index (SCI)*. Roadways with a “Poor” or “Fair” SCI rating get bonus points.
- *Drainage*. Points are assigned based on the severity of drainage problems.
- *Roadbed*. The foundation for the stability of a roadway is critical. Primitive, Bladed, or roadbeds needing improvement are assigned extra points.



Connectivity Data

- *Tribal Lands*. Points are given to projects that improve connectivity between Tribal lands.
- *Economic Development/New Housing/New Growth*. Projects that provide connections to new qualifying developments receive additional points.
- *BIA/Tribal Roads*. BIA or Tribally owned roadways get more points than state/local roadways.



Multimodal Data

For projects that provide pedestrian, bicycle, or trail components, additional points are added.



Cost Data

- *Project Cost*. Potential projects are assigned costs of “Low, Medium, and High.” High cost projects receive the fewest points with Low cost projects receiving the most.
- *Construction Impact*. Projects that do not involve construction (sign implementation, studies, transit, mapping, etc.) receive bonus points compared to new construction with no bonus points. Maintenance projects got some bonus points based on overall impact.



Included in TTIP

Projects that are already in the Tribal TIP are given additional points to account for the fact that funding is already dedicated to these projects.



Scoring the Projects



Component	Evaluation Measures	Score
Safety	Identified in Road Safety Audit	30%
	Road Safety Audit Risk Grade	
Roadway Standards	Drainage Condition	20%
	Minimum Width Standard	
	Roadbed Condition	
	Surface Condition Index	
Connectivity	Connections to Tribal Lands	15%
	Economic Development/Planned Expansion	
	Connection via BIA-owned Roads	
Multimodal	Provides Either Pedestrian, Bicycle, or Transit Opportunities	5%
Cost	Low, Medium, High	20%
	Construction vs. Maintenance	
Bonus in TTIP		+10
		100%

Ranking Criteria and Evaluation Measures



Safety Points		
Identified in Road Safety Audit	Project Identified	10 points
	Project Not Identified	0 points
Audit Risk Grade	Grade A	0 points
	Grade B	5 points
	Grade C	10 points
	Grade D or E	15 points
	Grade F	20 points

Ranking Criteria and Evaluation Measures

Ranking Criteria and Evaluation Measures

Roadway Standards Points		
Minimum Width	Project Increases roadway width to minimum	0 points
	Project remains below minimum	5 points
SCI	Project currently has Fair or Poor rating	5 points
	Project currently has Good or Excellend Rating	0 points
Drainage	Drainage problems or unimproved roads	5 points
	All other	0 points
Roadbed	Primitive, bladed or designed but needs improvement	5 points
	All other	0 points

Ranking Criteria and Evaluation Measures

Connectivity Points		
Connections to Tribal Lands	Yes	5 points
	No	0 points
Economic Development or Planned Expansion	Yes	5 points
	No	0 points
BIA or Tribal Road	Yes	5 points
	No	0 points

Ranking Criteria and Evaluation Measures

Multimodal Points		
Provides Pedestrian, Bicycle or Transit Opportunity	Yes	5 points
	No	0 points

Cost Points		
Project Cost	Low Cost	10 points
	Medium Cost	5 points
	High Cost	0 points
Construction Impact	Non-Construction Project	10 points
	Maintenance Project	5 points
	New Construction Project	0 points

Additional factors you may consider

- Public Pushback. . .the “not happy” factor
- Contributing funds available from outside agencies
- Potential severe Maintenance of Traffic issues
- Adverse cultural impacts
- Improves Emergency Response
- What are some more?



GROUP ACTIVITY



Task

- 1) Split up into four groups.
- 2) Given information about four different example routes, score each route and then come up with your project priority list for your TIP.
- 3) Winner pick up your prize!!

What's the Prize?





Task

Safety Points			Score
Identified in Road Safety Audit	Project Identified	10 points	
	Project Not Identified	0 points	
Audit Risk Grade	Grade A	0 points	
	Grade B	5 points	
	Grade C	10 points	
	Grade D or E	15 points	
	Grade F	20 points	
Roadway Standards Points			
Minimum Width	Project Increases roadway width to minimum	0 points	
	Project remains below minimum	5 points	
SCI	Project currently has Fair or Poor rating	5 points	
	Project currently has Good or Excellend Rating	0 points	
Drainage	Drainage problems or unimproved roads	5 points	
	All other	0 points	
Roadbed	Primitive, bladed or designed but needs improvement	5 points	
	All other	0 points	
Connectivity Points			
Connections to Tribal Lands	Yes	5 points	
	No	0 points	
Economic Development or Planned Expansion	Yes	5 points	
	No	0 points	
BIA or Tribal Road	Yes	5 points	
	No	0 points	
Multimodal Points			
Provides Pedestrian, Bicycle or Transit Opprotunity	Yes	5 points	
	No	0 points	
Cost Points			
Project Cost	Low Cost	10 points	
	Medium Cost	5 points	
	High Cost	0 points	
Construction Impact	Non-Construction Project	10 points	
	Maintenance Project	5 points	
	New Construction Project	0 points	
Total Points			

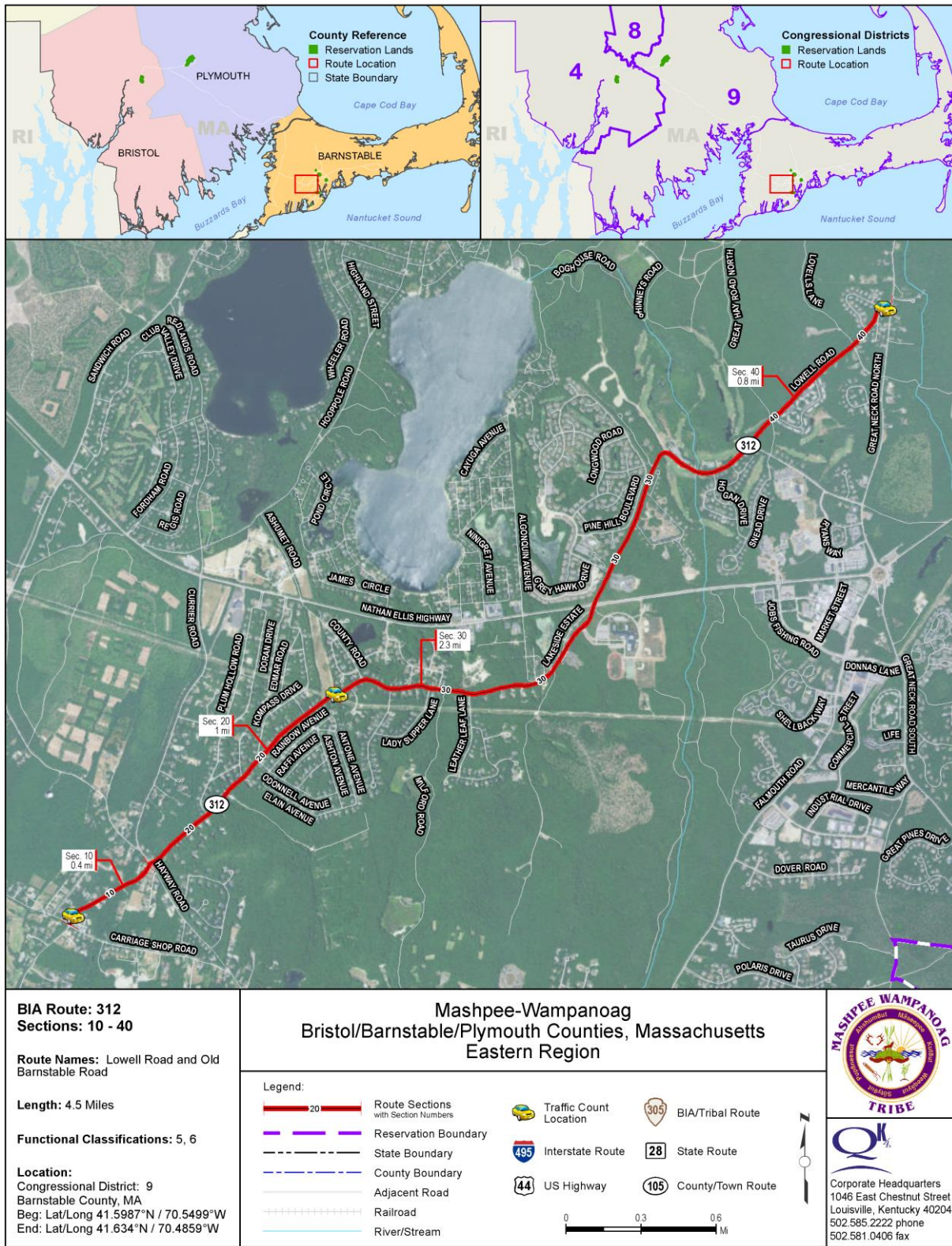
Route 312 – Old Barnstable Road

Project: Construct Pedestrian/Sidewalk Path and correct geometric deficiencies.

RSA Grade: E

Cost: High





TTP

TTP Inventory Route Summary

FIELD	FIELD DESCRIPTION	CODE	CODE DESCRIPTION	FIELD	FIELD DESCRIPTION	CODE	CODE DESCRIPTION
	Fiscal Year	2018		39	Right of Way Utility	3	Both
1-2	Area / Agency	S 50	Eastern Region	40	Right of Way Cost (\$1K/mi)		
3	Reservation	035	Mashpee Wampanoag	41	Begin Latitude	41.6118	
4	Route Number	0312		42	End Latitude	41.6260	
5	Section Number	30	(Update Year)	43	Begin Longitude	-70.5290	
Exist. RIFDS Status	RETURNED-TO-FIELD	2014		44	End Longitude	-70.4970	
7	State	25	Massachusetts	45	Atlas Map Number		
8	Ownership	5	County and Township	46	Grade Deficiencies	7	None > than Max Allow
9	Federal Aid Category	1	Local Roads (Other)	47	Sight Deficiencies	5	90-100% of Sect. Meets Req.
10	Classification	4	Rural Major Collector	48	Num. of Curve Deficiencies	0	
11	Terrain	2	Rolling	49	Num. of Stopping Restrict.	0	
12	Construction Need	2	Construction Need of Other	50	Safety Study	3	Unexpected Sharp Curves
13	Surface Type	5	Bituminous > 2"	51	Road Category	A	General (Regular) Roads
14	Shoulder Type	3	Paved Shoulder	52	Year of Construction Chg.	1959	
15	Length of Section (mi)	2.3		31	Narrative		
16	Surface Width (ft)	20					
17	Shoulder Width (ft)	2					
18	Bridge Number						
19	Bridge Condition						
20	Bridge Length (ft)			55	Field Remark		
21	ADT Year	2016	(Projected ADT)				
22	Existing ADT	2,757	4,093				
23	Percent Trucks	7					
24	Surface (SCI)	74	Fair				
25	Roadbed Condition	4	Designed, but Needs Improve	56	Tribal Coordinator	J. STEIDING	
26	Level of Maintenance	4	Optimum - 90-100%	57	Inventory Taker	QK4, INC.	
27	Snow and Ice Control	5	Effort = 5		L RTP		
28	Right of Way Status	4	Statutory ROW Obtained		Tribal Resolution		
29	Right of Way Width (ft)	42					
30	Additional Incidental %						
31a	Road / Bridge Name	OLD BARNSTABLE ROAD					
32	County	001	Barnstable County				
33	Congressional District	09					
34	Owner Route Number	312	Town of Mashpee				
35	Drainage Condition	2	Occasional Drainage Prob.				
36	Shoulder Condition	2	Tolerable				
37	Number of RR Crossings	0					
38	RR Crossing Type						

Photo Direction
Looking East

Photo Date
9/1/2011

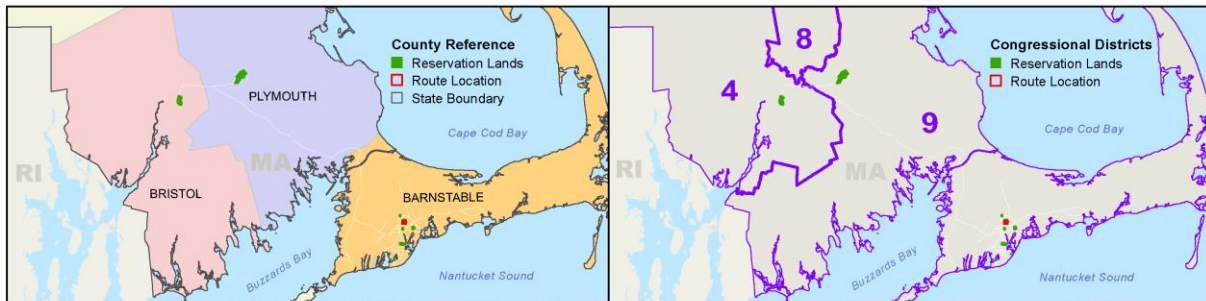
Route 5035 – Sanitary Access Road

Project: Upgrade roadway to paved surface.

RSA Grade: C

Cost: Medium





BIA Route: 5035
Sections: 10 - 30

Route Names: Sanitary Parking Access Road, Sanitary Parking Lot, and Sanitary Field Access Road

Length: 0.3 Mile

Functional Classification: 7

Location:
Congressional District: 9
Barnstable County, MA
Beg: Lat/Long 41.6369°N / 70.4779°W
End: Lat/Long 41.6375°N / 70.476°W

Mashpee-Wampanoag
Bristol/Barnstable/Plymouth Counties, Massachusetts
Eastern Region

Legend:

- Route Sections with Section Numbers
- Reservation Boundary
- State Boundary
- County Boundary
- Adjacent Road
- Railroad
- River/Stream

Traffic Count Location

- Interstate Route
- US Highway
- BIA/Tribal Route
- State Route
- County/Town Route

Scale: 0 100 200 Ft

MASHPEE WAMPANOAG TRIBE

Corporate Headquarters
1046 East Chestnut Street
Louisville, Kentucky 40204
502.585.2222 phone
502.581.0406 fax

TTP Inventory Route Summary

FIELD	FIELD DESCRIPTION	CODE	CODE DESCRIPTION	FIELD	FIELD DESCRIPTION	CODE	CODE DESCRIPTION
	Fiscal Year	2018		39	Right of Way Utility	1	Underground Utility
1-2	Area / Agency	S 50	Eastern Region	40	Right of Way Cost (\$1K/mi)		
3	Reservation	035	Mashpee Wampanoag	41	Begin Latitude	41.6369	
4	Route Number	5035		42	End Latitude	41.6377	
5	Section Number	10	(Update Year)	43	Begin Longitude	-70.4779	
Exist. RIFDS Status	AT-THE-BIA/DOT	2017		44	End Longitude	-70.4774	
7	State	25	Massachusetts	45	Atlas Map Number		
8	Ownership	2	Tribal	46	Grade Deficiencies	7	None > than Max Allow
9	Federal Aid Category	1	Local Roads (Other)	47	Sight Deficiencies	5	90-100% of Sect. Meets Req.
10	Classification	5	Rural Local	48	Num. of Curve Deficiencies	1	
11	Terrain	1	Flat	49	Num. of Stopping Restrict.	0	
12	Construction Need	2	Construction Need of Other	50	Safety Study	0	No Unsafe Conditions
13	Surface Type	3	Gravel Surface	51	Road Category	C	Administrative
14	Shoulder Type			52	Year of Construction Chg.	2015	
15	Length of Section (mi)	0.1		31	Narrative		
16	Surface Width (ft)	14					
17	Shoulder Width (ft)	0					
18	Bridge Number						
19	Bridge Condition						
20	Bridge Length (ft)			55	Field Remark		
21	ADT Year		(Projected ADT)				
22	Existing ADT	50	74				
23	Percent Trucks						
24	Surface (SCI)	77	Fair	56	Tribal Coordinator	J. STEIDING	
25	Roadbed Condition	2	Bladed Road	57	Inventory Taker	QK4, INC.	
26	Level of Maintenance	4	Optimum - 90-100%		L RTP		
27	Snow and Ice Control	1	Effort = 1 (Slight)		Tribal Resolution		
28	Right of Way Status	0	No Easement or Tr				
29	Right of Way Width (ft)	0					
30	Additional Incidental %						
31a	Road / Bridge Name		SANITARY PARKING ACCESS ROAD				
32	County	001	Barnstable County				
33	Congressional District	09					
34	Owner Route Number	5035	Mashpee Wampanoag Tribe				
35	Drainage Condition	2	Occasional Drainage Prob.				
36	Shoulder Condition	0	No Shoulders				
37	Number of RR Crossings	0					
38	RR Crossing Type						

Photo Direction
Looking North

Photo Date
8/30/2016



Route 104 – Great Neck Road South

Project: Improve sight distance at the Tribal Government Center Entrance.

RSA Grade: D

Cost: Medium



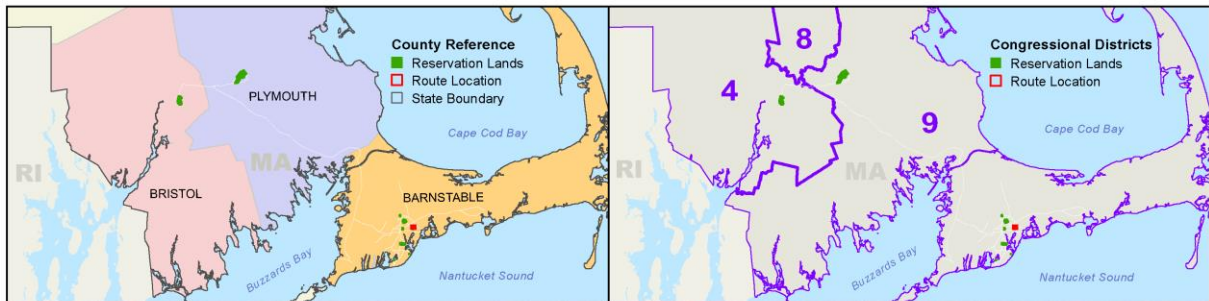
Route 5039 – Horse Farm Access Road

Project: Upgrade paved road to paved surface and improve drainage.

RSA Grade: Not Identified

Cost: High





BIA Route: 5039
Sections: 10 - 60

Route Names: Horse Farm Service Road, Riding Ring Access Road, Horse Farm Auxiliary Parking Access, Horse Farm Auxiliary Park Lot, and Public Works Parking Access

Length: 0.7 Mile

Functional Classification: 7

Location:
Congressional District: 9
Barnstable County, MA
Beg: Lat/Long 41.6262°N / 70.4542°W
End: Lat/Long 41.6279°N / 70.452°W

Mashpee-Wampanoag
Bristol/Barnstable/Plymouth Counties, Massachusetts
Eastern Region

Legend:

- Route Sections with Section Numbers
- Reservation Boundary
- State Boundary
- County Boundary
- Adjacent Road
- Railroad
- River/Stream

Traffic Count Location

- Interstate Route
- US Highway
- BIA/Tribal Route
- State Route
- County/Town Route

Scale: 0 150 300 Ft

MASHPEE WAMPANOAG TRIBE

Corporate Headquarters
1046 East Chestnut Street
Louisville, Kentucky 40204
502.585.2222 phone
502.581.0406 fax

TTP Inventory Route Summary

FIELD	FIELD DESCRIPTION	CODE	CODE DESCRIPTION
	Fiscal Year	2018	
1-2	Area / Agency	S 50	Eastern Region
3	Reservation	035	Mashpee Wampanoag
4	Route Number	5039	
5	Section Number	10	(Update Year)
Exist. RIFDS Status	AT-THE-BIA/DOT	2017	
7	State	25	Massachusetts
8	Ownership	2	Tribal
9	Federal Aid Category	1	Local Roads (Other)
10	Classification	5	Rural Local
11	Terrain	2	Rolling
12	Construction Need	2	Construction Need of Other
13	Surface Type	3	Gravel Surface
14	Shoulder Type		
15	Length of Section (mi)	0.2	
16	Surface Width (ft)	14	
17	Shoulder Width (ft)	0	
18	Bridge Number		
19	Bridge Condition		
20	Bridge Length (ft)		
21	ADT Year		(Projected ADT)
22	Existing ADT	50	74
23	Percent Trucks		
24	Surface (SCI)	47	Poor
25	Roadbed Condition	2	Bladed Road
26	Level of Maintenance	1	Little - 0-9%
27	Snow and Ice Control	2	Effort = 2
28	Right of Way Status	0	No Easement or Tr
29	Right of Way Width (ft)	0	
30	Additional Incidental %		
31a	Road / Bridge Name	HORSE FARM SERVICE ROAD	
32	County	001	Barnstable County
33	Congressional District	09	
34	Owner Route Number	5039	Mashpee Wampanoag Tribe
35	Drainage Condition	1	Severe Drainage Problems
36	Shoulder Condition	0	No Shoulders
37	Number of RR Crossings	0	
38	RR Crossing Type		

FIELD	FIELD DESCRIPTION	CODE	CODE DESCRIPTION
39	Right of Way Utility	3	Both
40	Right of Way Cost (\$1K/mi)		
41	Begin Latitude	41.6262	
42	End Latitude	41.6278	
43	Begin Longitude	-70.4542	
44	End Longitude	-70.4524	
45	Atlas Map Number		
46	Grade Deficiencies	7	None > than Max Allow
47	Sight Deficiencies	5	90-100% of Sect. Meets Req.
48	Num. of Curve Deficiencies	0	
49	Num. of Stopping Restrict.	0	
50	Safety Study	0	No Unsafe Conditions
51	Road Category	C	Administrative
52	Year of Construction Chg.	1959	
31	Narrative		
55	Field Remark	This route section replaces FY 2017 Route 1 Section 10.	
56	Tribal Coordinator	J. STEIDING	
57	Inventory Taker	QK4, INC.	
	L RTP		
	Tribal Resolution		

Photo Direction: Looking North

Photo Date: 12/15/2015





Questions?

Thank you for your time!!



Matthew T. Riddell
Director of Native
American Services
mriddell@qk4.com
(502) 585-2222

