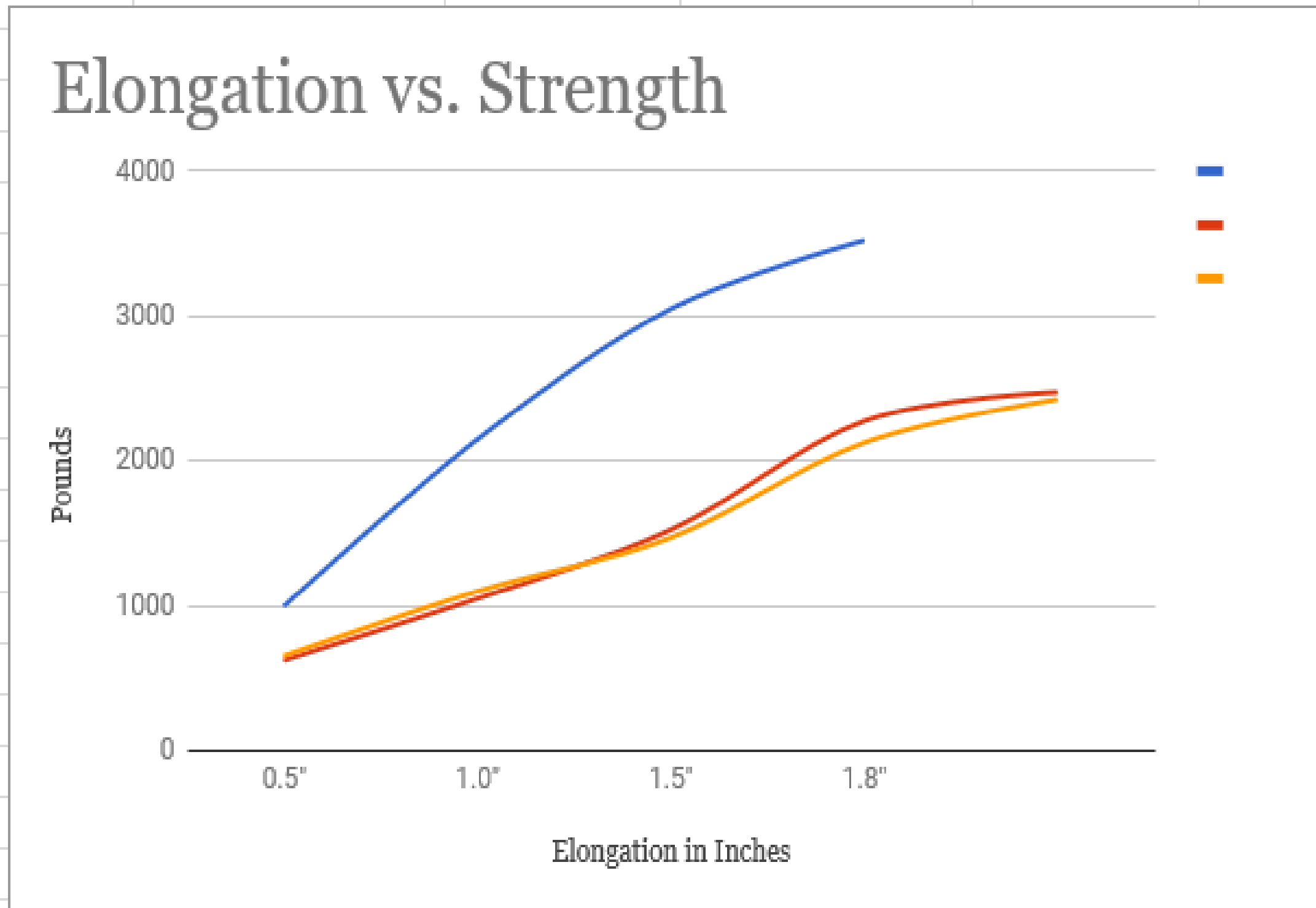


# Alternate Reinforcement for Structural Concrete

By: Barrett Lowe

Material Stength / Elongation Graph					
Speed of Test Machine		ASTM Standards <0.1"/second			
Pine Wood		PVC Ext.		PVC Int.	
Elongation	Pounds	Elongation	Pounds	Elongation	Pounds
0.5"	1000	0.5"	625	0.5"	655
1.0"	2150	1.0"	1050	1.0"	1100
1.5"	3050	1.5"	1525	1.5"	1470
BROKE @ 1.8"	3520	2.0""	2275	2.0""	2125
XXX		BROKE @ 2.36"	2475	BROKE @ 2.41"	2425
XXX		XXX		XXX	

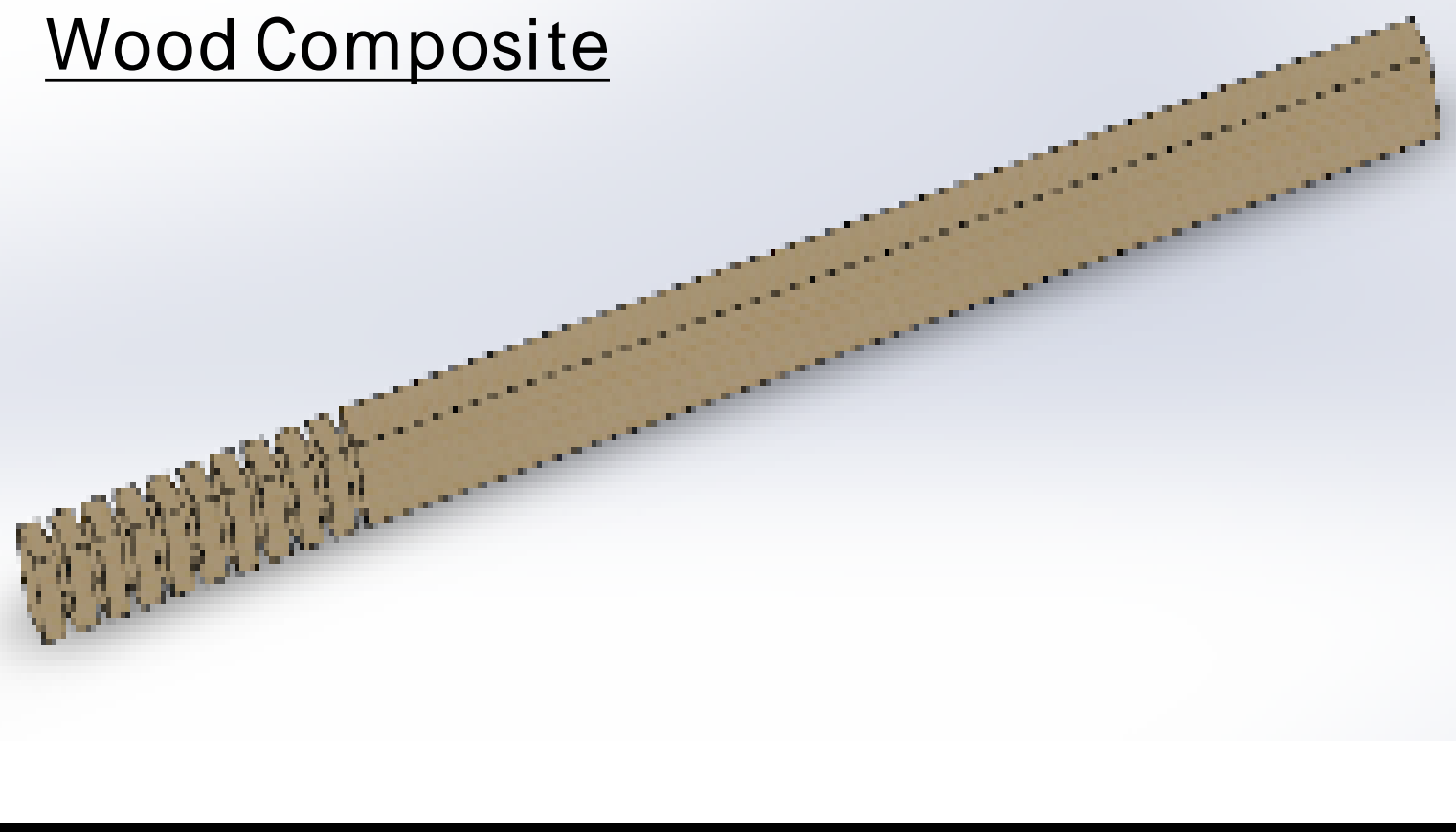


Standard reinforcing bars used in the construction industry

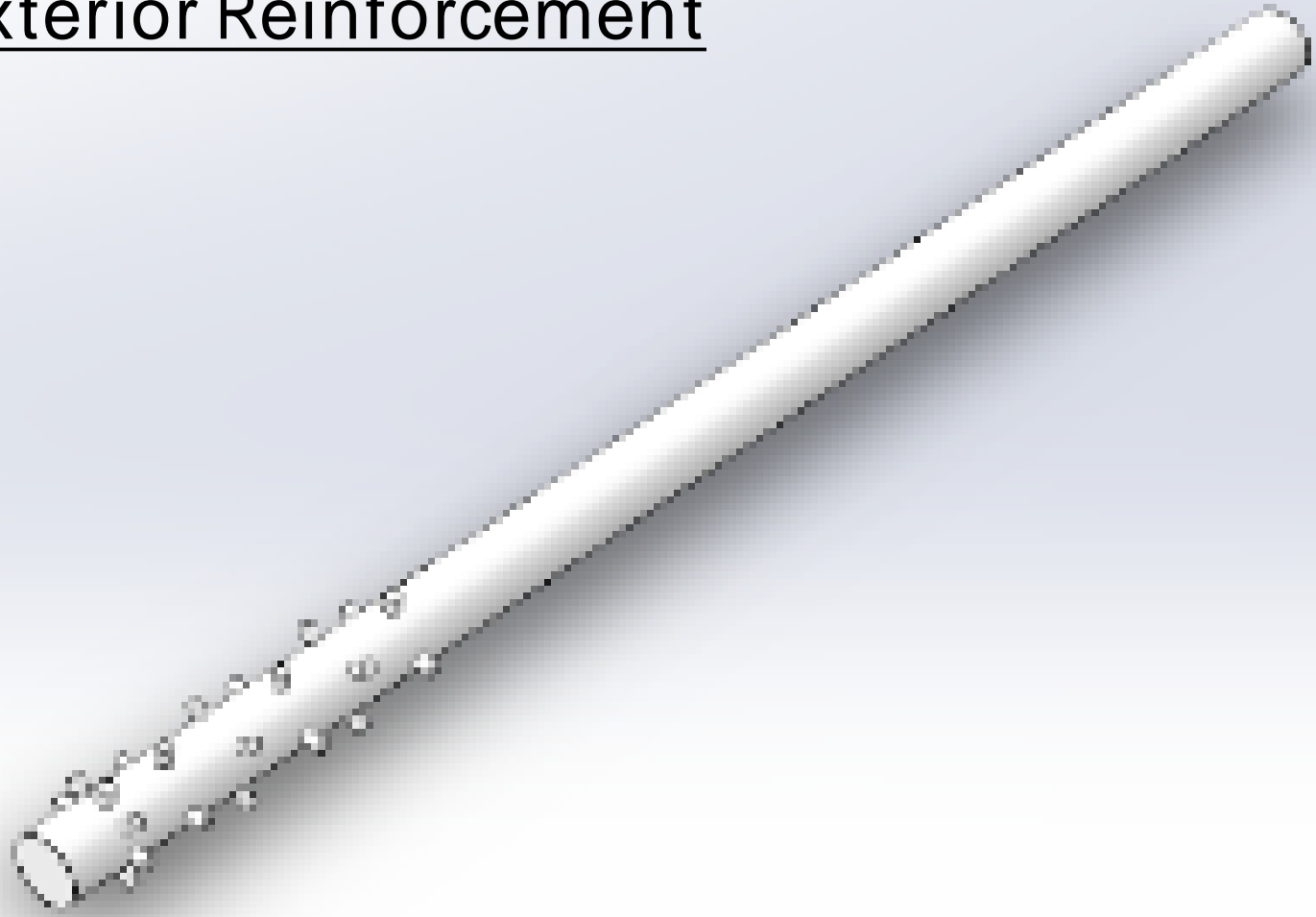
## Results

Although the results proved that the alternate reinforcement materials I chose were significantly less strong outside of concrete, the scalability for future tests with materials with greater tensile strength could yield a result capable of replacing rebar in the construction industry.

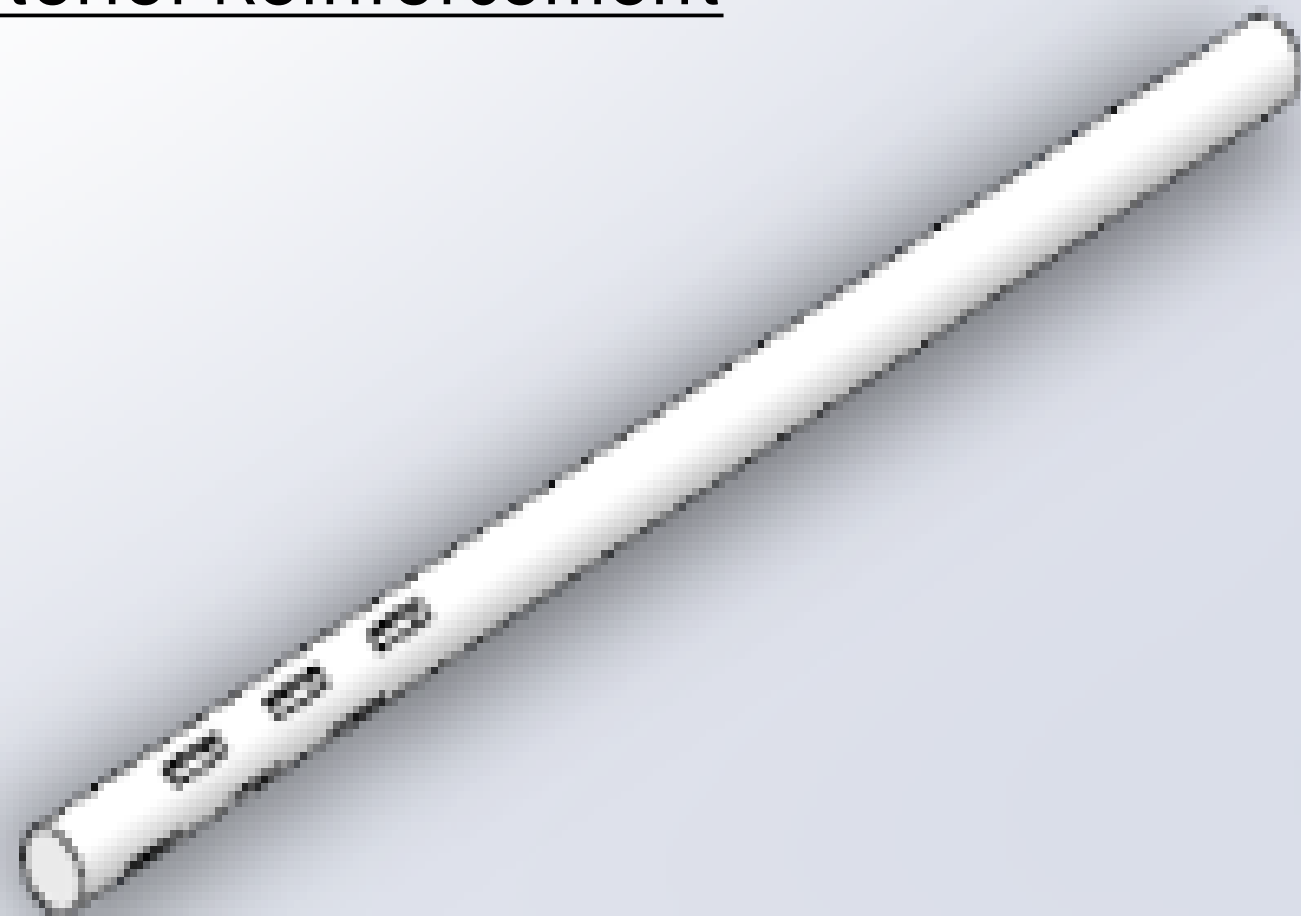
## Wood Composite



## Exterior Reinforcement



## Interior Reinforcement



## ABSTRACT