

Supplementary Materials

Where Are Potential Areas for Transit-Oriented Development (TOD)—Exploring the Demands for Built Environment for TOD Planning

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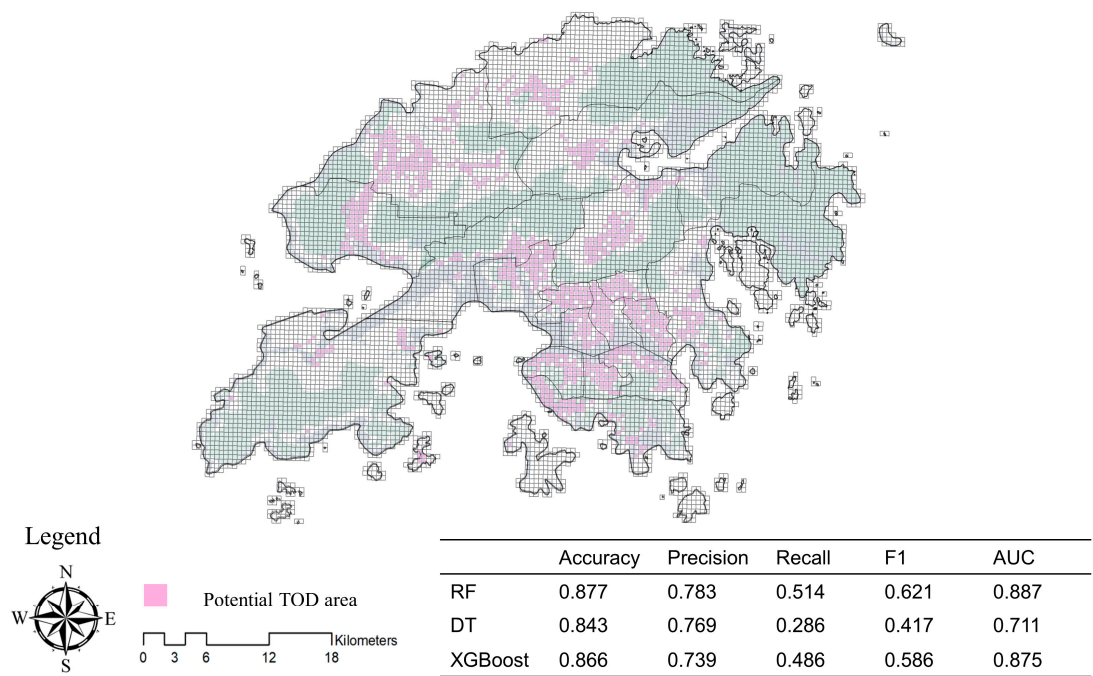


Figure S1. Potential TOD areas in 400 m × 400 m Hong Kong grid map and validator scores of random forest (RF), decision tree (DT) and XGBoost classifiers.

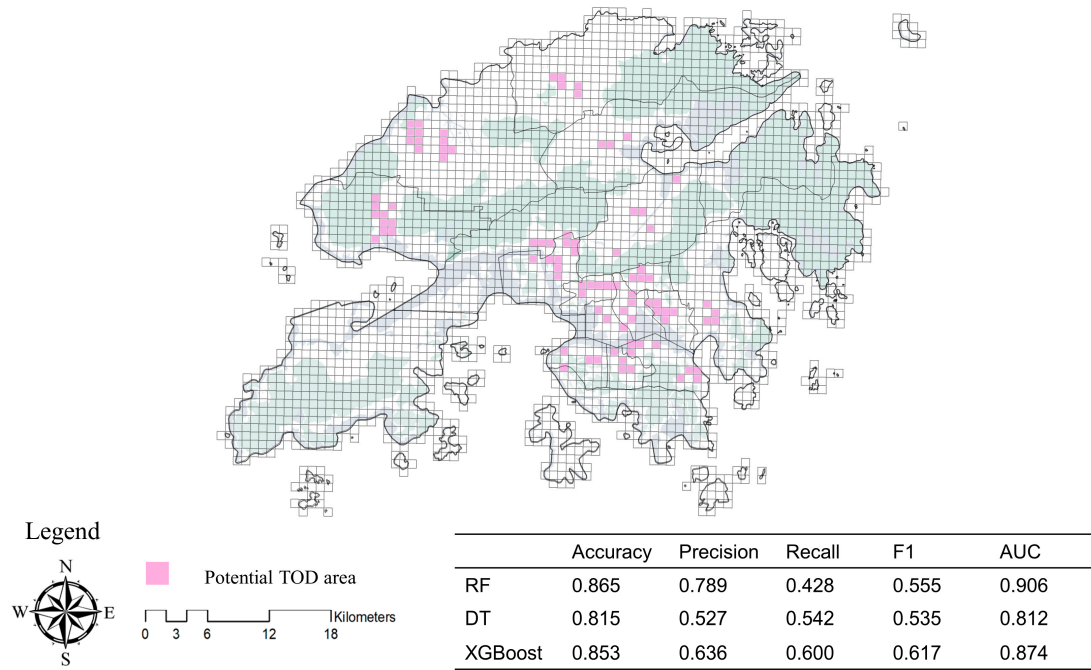


Figure S2. Potential TOD areas in 800 m × 800 m Hong Kong grid map and validator scores of random forest (RF), decision tree (DT) and XGBoost classifiers.

Table S1. Validator scores of random forest (RF) model at different sizes of the smallest study unit (grid) in Hong Kong.

Study unit (grid)	Standard evaluation metrics				
	Accuracy	PS	RS	F1	AUC
400 m × 400 m	0.877	0.783	0.514	0.621	0.887
600 m × 600 m	0.891	0.810	0.773	0.791	0.916
800 m × 800 m	0.865	0.789	0.428	0.555	0.906

PS, RS, and AUC indicate precision score, recall score, and area under receiver operating characteristic, respectively.

Table S2. Validator scores of random forest (RF) model at different ratios of Hong Kong training set and Hong Kong test set.

RF model	Hong Kong data set (label “1”: label “0”)	Standard evaluation metrics				
		Accuracy	PS	RS	F1	AUC
RF-a	83:100	0.831	0.761	0.640	0.667	0.926
RF-b	83:200	0.837	0.823*	0.560	0.667	0.926
RF-c	83:300	0.891*	0.810*	0.773*	0.791*	0.916
RF-d	83:400	0.888*	0.736	0.560	0.636	0.895
RF-e	83:500	0.880*	0.812*	0.520	0.634	0.968*

* Represents the ideal model performance scores of each evaluation metric. PS, RS, and AUC indicate precision score, recall score, and area under receiver operating characteristic, respectively. The study unit was set as 600 m × 600 m

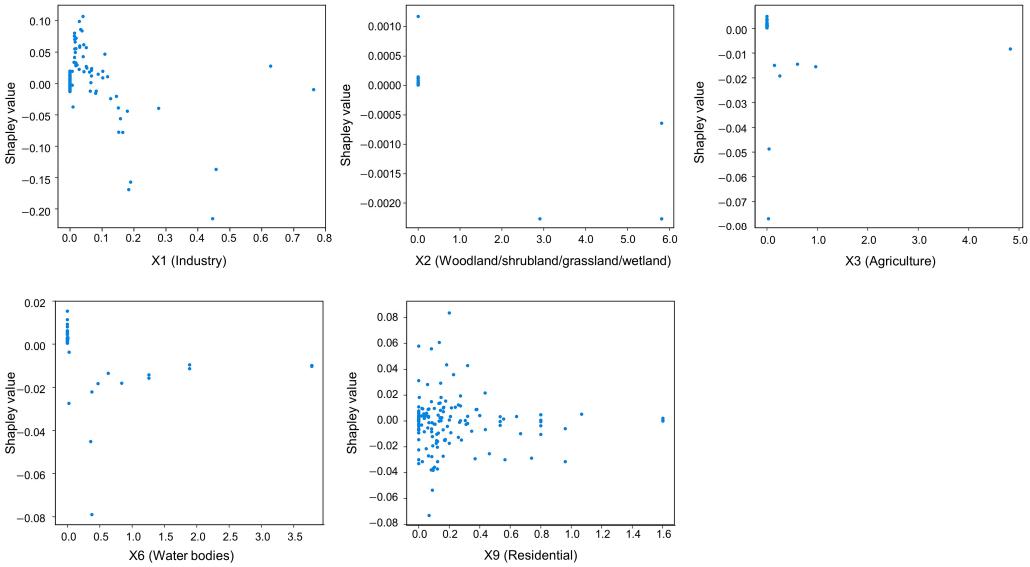


Figure S3. Partial dependence plots of the remaining five indicators (including X1, X2, X3, X6, and X9) on potential TOD area identification.